

Supporting information

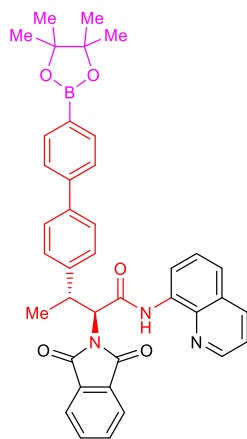
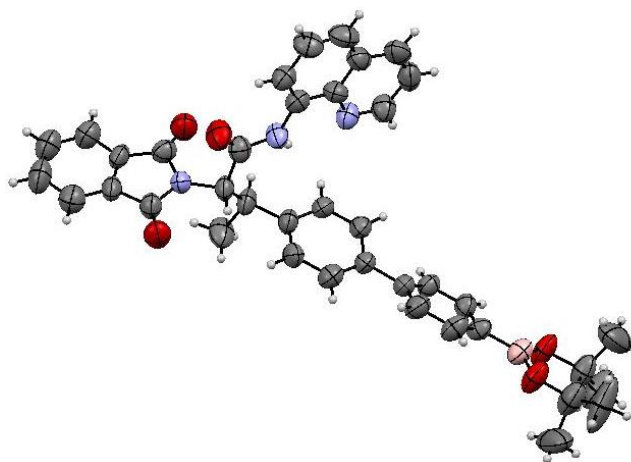
Successive diastereoselective C(sp³)-H arylation and Suzuki coupling toward enantioenriched polyaryl unnatural amino acid motifs

Department of Chemical Sciences Indian Institute of Science Education and Research (IISER)
Mohali Knowledge City, Sector 81, SAS Nagar, Mohali, Manauli P.O., Punjab, 140306, India,
E-mail: sababu@iisermohali.ac.in.

Contents

Brief crystal and X-ray structure of 21a-(L)	Page 2
Examples of failed attempts: Cross-coupling reactions in substrates containing 8-aminoquinoline directing group (Q) and phthalimide protecting group	Pages 3-5
Copy of Proton and Carbon NMR spectra of compounds	Pages 6-530
Copy of HPLC analysis charts	Pages 531-604

Brief crystal data and X-ray structure of 21a-(L)



21a-(L)

checkCIF/PLATON report

Structure factors have been supplied for datablock(s) sb_1930_10102024

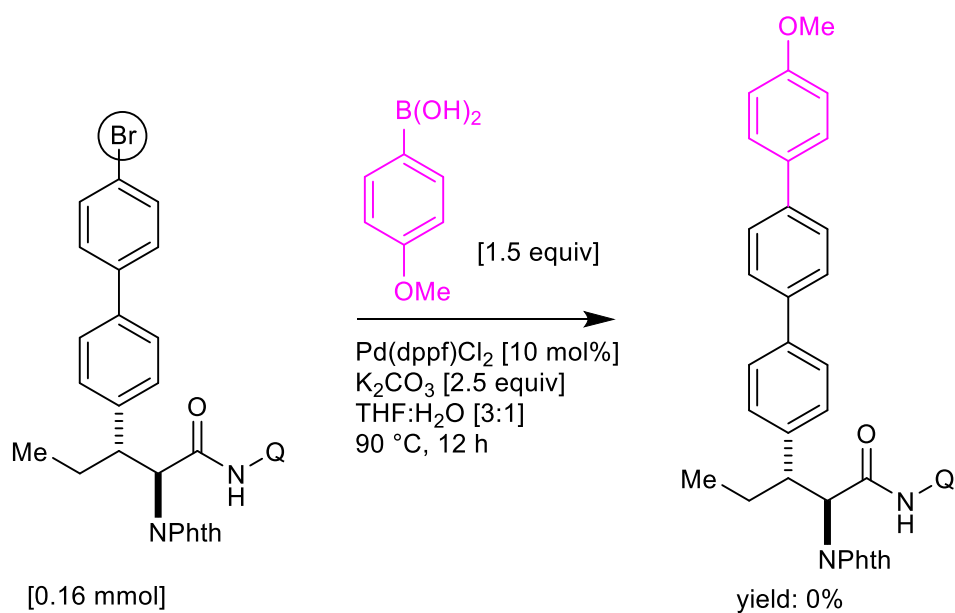
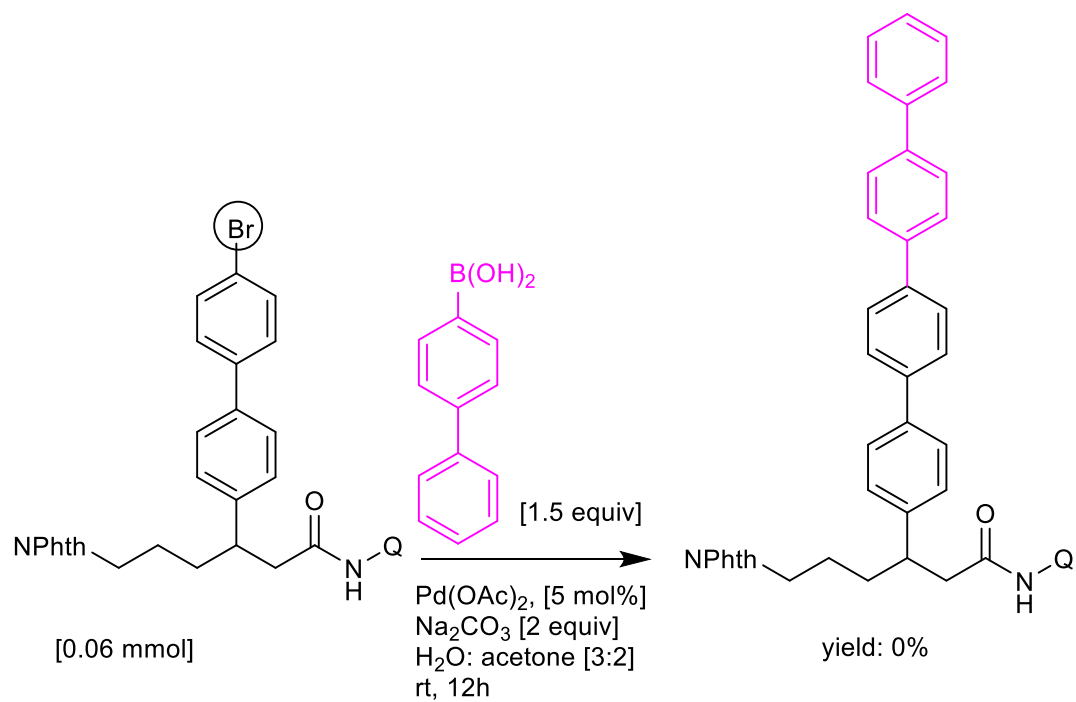
THIS REPORT IS FOR GUIDANCE ONLY. IF USED AS PART OF A REVIEW PROCEDURE FOR PUBLICATION, IT SHOULD NOT REPLACE THE EXPERTISE OF AN EXPERIENCED CRYSTALLOGRAPHIC REFEREE.

No syntax errors found. CIF dictionary Interpreting this report

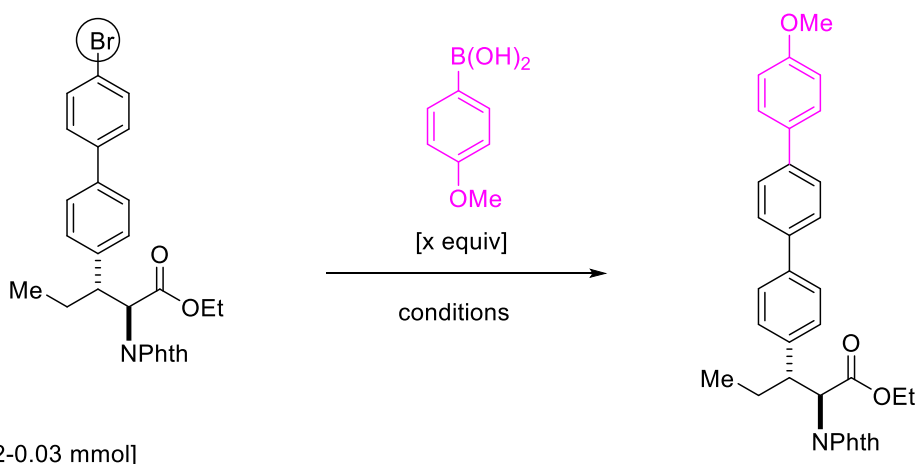
Datablock: sb_1930_10102024

Bond precision:	C-C = 0.0138 Å	Wavelength=0.71073
Cell:	a=14.619(3) alpha=90.073(17)	b=6.8032(17) beta=97.420(16)
Temperature:	293 K	c=17.129(3) gamma=89.77(2)
Volume	Calculated 1689.3(6)	Reported 1689.3(6)
Space group	P 21	P 1 21 1
Hall group	P 2yb	P 2yb
Moiety formula	C39 H36 B N3 O5	C39 H36 B N3 O5
Sum formula	C39 H36 B N3 O5	C39 H36 B N3 O5
Mr	637.52	637.52
Dx, g cm ⁻³	1.253	1.253
Z	2	2
Mu (mm ⁻¹)	0.083	0.083
F000	672.0	672.0
F000'	672.30	
h,k,lmax	22,10,26	20,10,25
Nref	12704[6809]	8670
Tmin,Tmax	0.992,0.992	0.992,1.000
Tmin'	0.992	
Correction method=	# Reported T Limits: Tmin=0.992 Tmax=1.000	
AbsCorr =	MULTI-SCAN	
Data completeness=	1.27/0.68	Theta(max)= 32.915
R(Reflections)=	0.0908(2396)	wR2(Reflections)=
S =	0.993	0.2775(8670)
	Npar= 442	

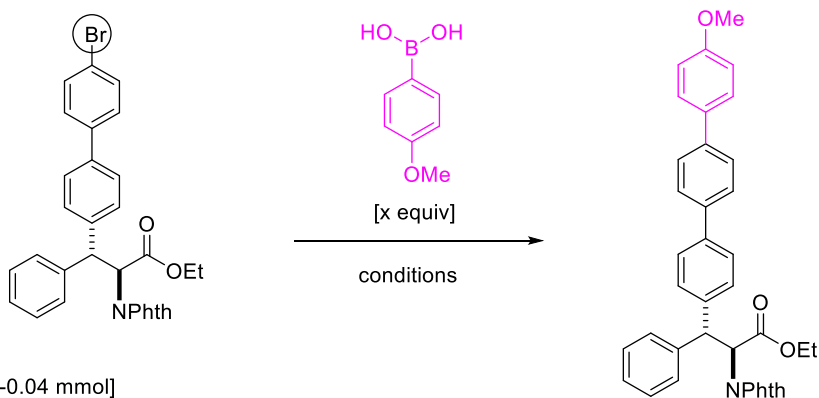
Examples of failed attempts: Cross-coupling reactions in substrates containing 8-aminoquinoline directing group (Q) and phthalimide protecting group.



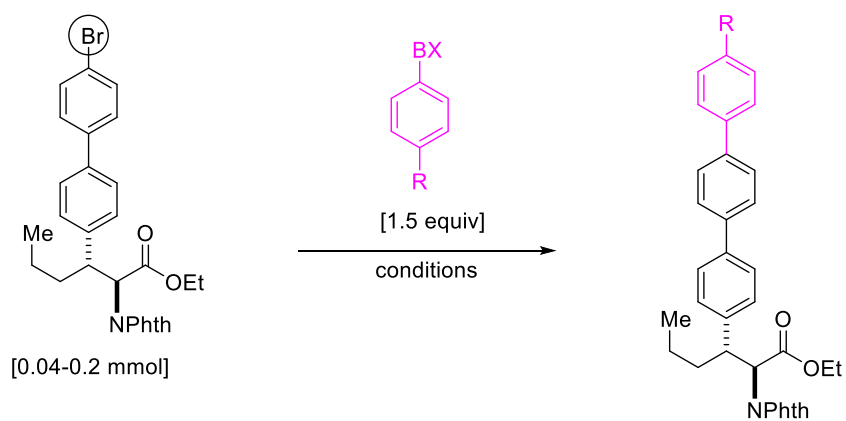
Examples of failed attempts: Cross-coupling reactions in substrates containing phthalimide protecting group.



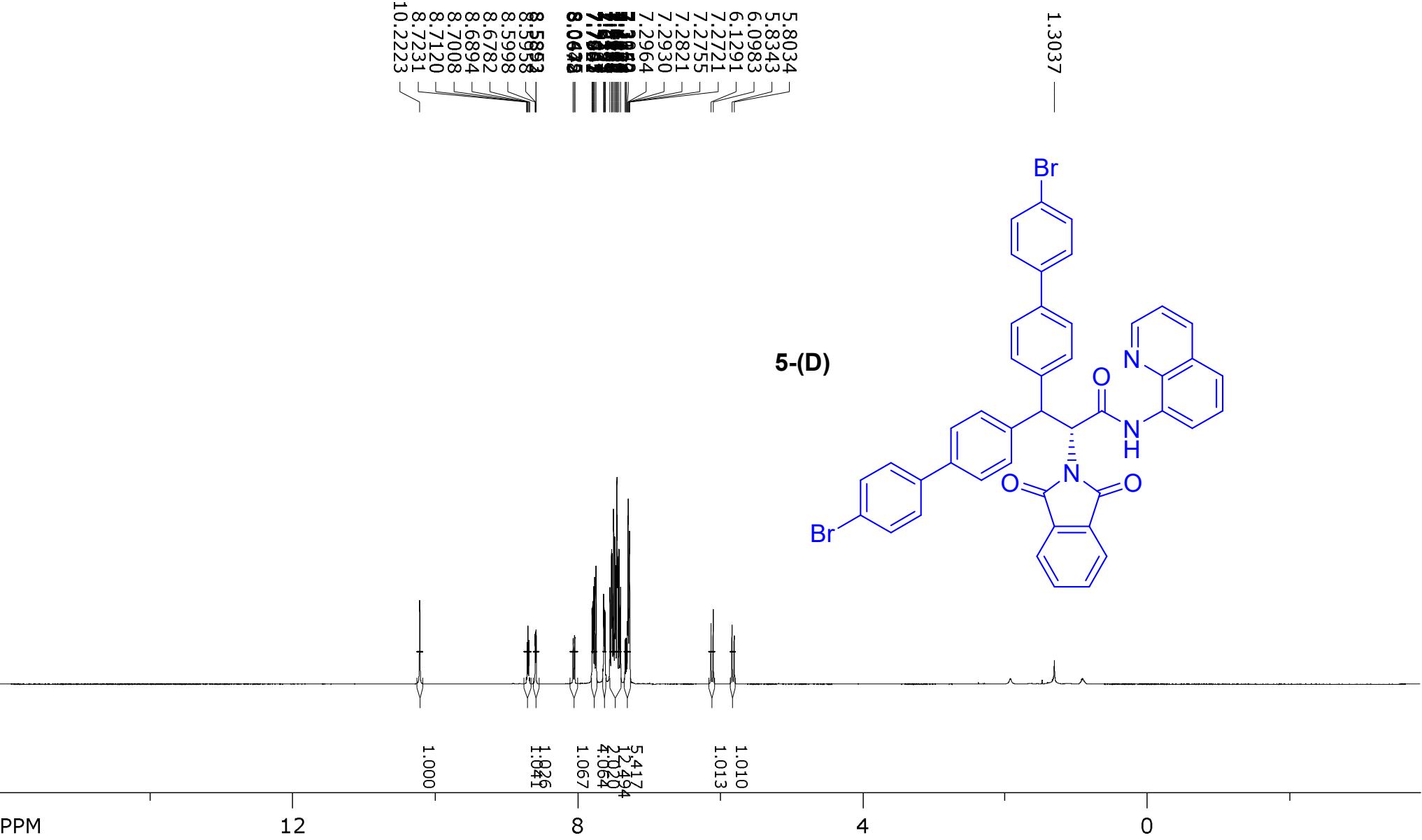
Entry	ArB(OH) ₂ [x equiv]	catalyst [y mol%]	base [z equiv]	solvent [mL]	time [h]	temp [°C]	yield [%]
1	1.5	Pd(PPh ₃) ₄ , [6]	Na ₂ CO ₃ , [2]	Toluene:H ₂ O [8:1, 2 mL]	16	90	0%
2	1.2	Pd(Cl) ₂ , [1]	K ₂ CO ₃ , [2]	DMF [2 mL]	36	110	0%
3	1.5	Pd(PPh ₃) ₄ , [2]	K ₃ PO ₄ , [2.5]	DMF [1 mL]	36	110	0%

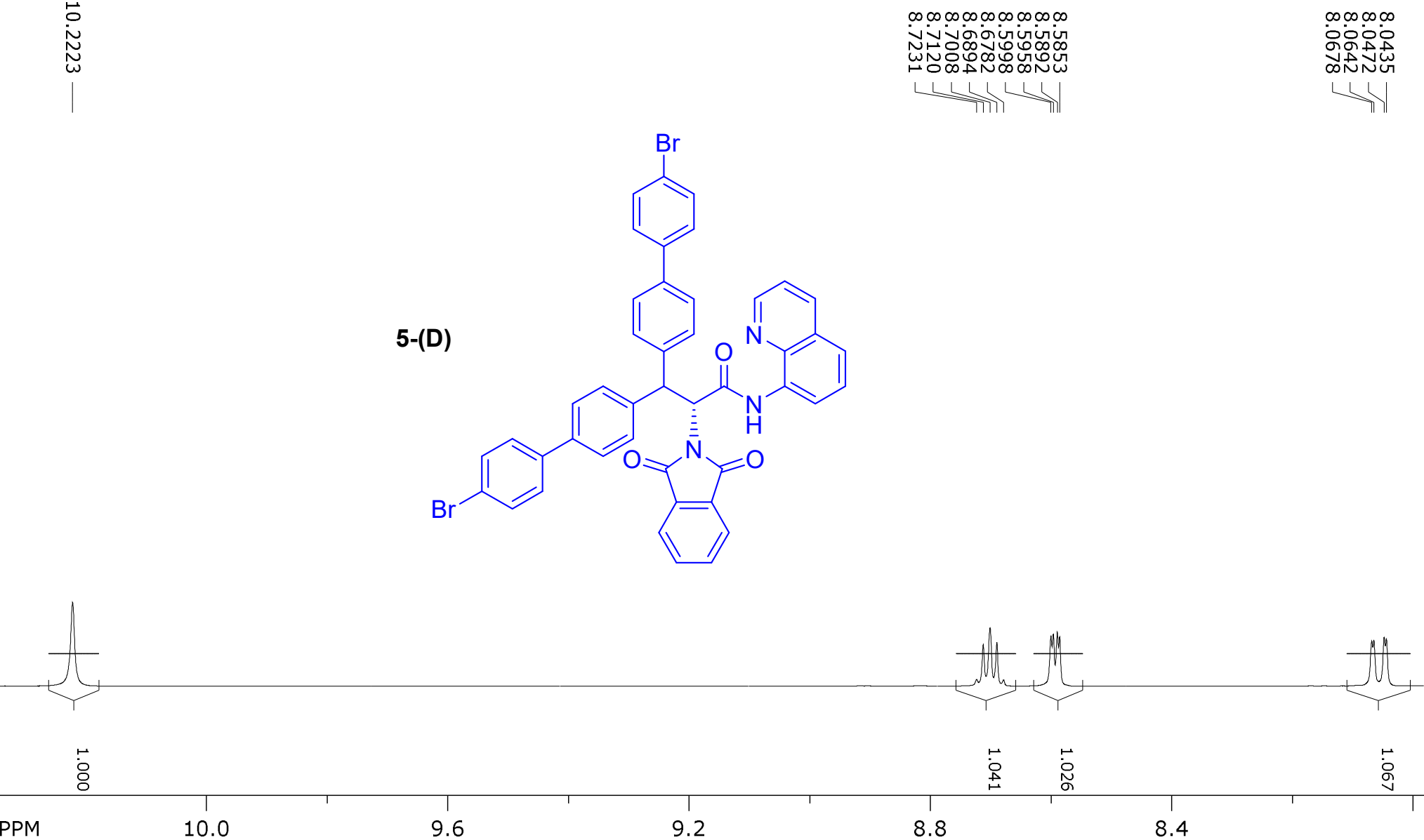


Entry	ArB(OH) ₂ [x equiv]	catalyst [y mol%]	base [z equiv]	solvent [mL]	Ligand w mol%	time [h]	temp [°C]	yield [%]
1	1.5	Pd(OAc) ₂ , [10]	K ₂ CO ₃ , [2]	THF [2 mL]	^t BuXPhos [40 mol%]	12	80	0%
2	1.5	Pd(OAc) ₂ , [10]	Et ₃ N, [0.2 mL]	MeCN [2 mL]	P(o-tolyl) ₃ , [25 mol%]	17	85	0%
3	2	Pd(OAc) ₂ , [10]	K ₃ PO ₄ , [3]	THF [3 mL]	X-Phos [20 mol%]	12	110	0%
4	1.5	Pd(PPh ₃) ₄ , [10]	K ₃ PO ₄ , [3]	DMF [1 mL]	-	24	110	0%
5	1.5	Pd(PPh ₃) ₄ , [10]	K ₂ CO ₃ , [3]	Tol:EtOH:H ₂ O [2:1:1, total 1.4 mL]	-	12	110	0%



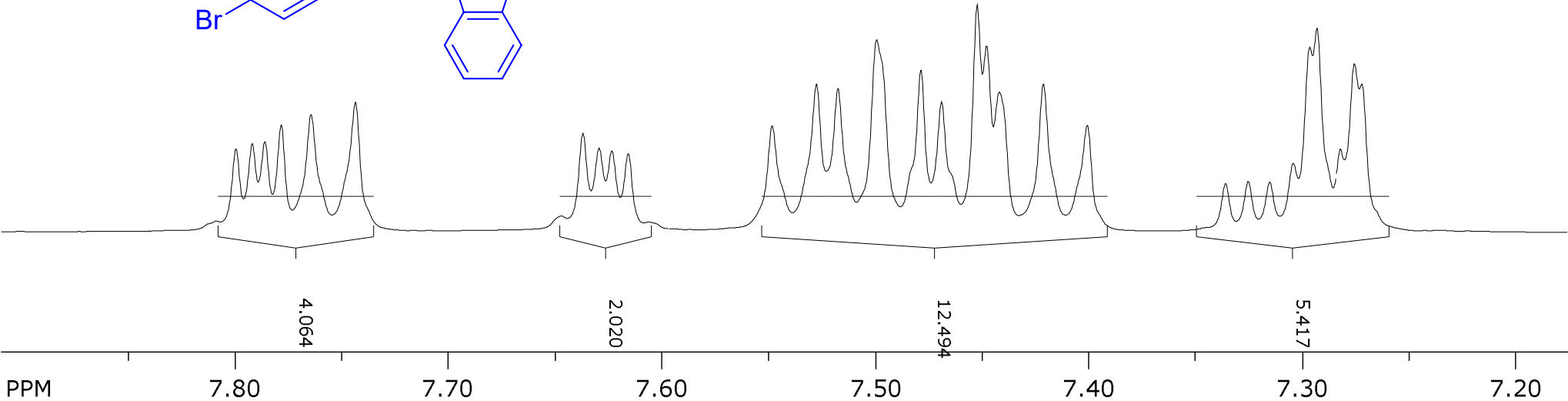
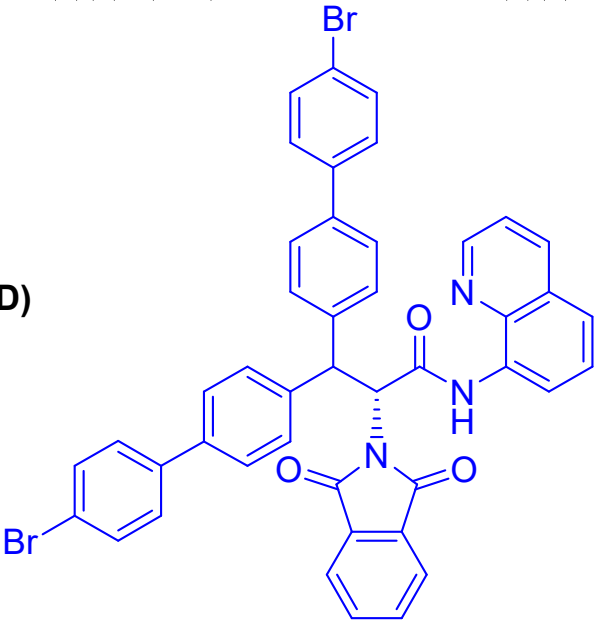
Entry	ArBX	catalyst [y mol%]	base [z equiv]	ligand [a mol%]	solvent [mL]	time [h]	temp [°C]	yield [%]
1	X=(OH) ₂ R=OMe	Pd(PPh ₃) ₄ [5]	K ₃ PO ₄ [2.5]	XantPhos [20]	THF:H ₂ O [8:1]	12	80	0%
2	X=(OH) ₂ R=OMe	Pd(OAc) ₂ , [10]	K ₃ PO ₄ [3]	X-Phos [20]	THF [1 mL]	12	80	0%
3	X=F ₃ K R=H	Pd(OAc) ₂ , [5]	K ₂ CO ₃ , [2]	P(o-tolyl) ₃ [25 mol%]	MeOH [1 mL]	17	65	0%
4	X=(OH) ₂ R=Ph	Pd(OAc) ₂ , [10]	Et ₃ N [0.2 mL]	P(o-tolyl) ₃ [25 mol%]	MeCN [3 mL]	17	85	47%

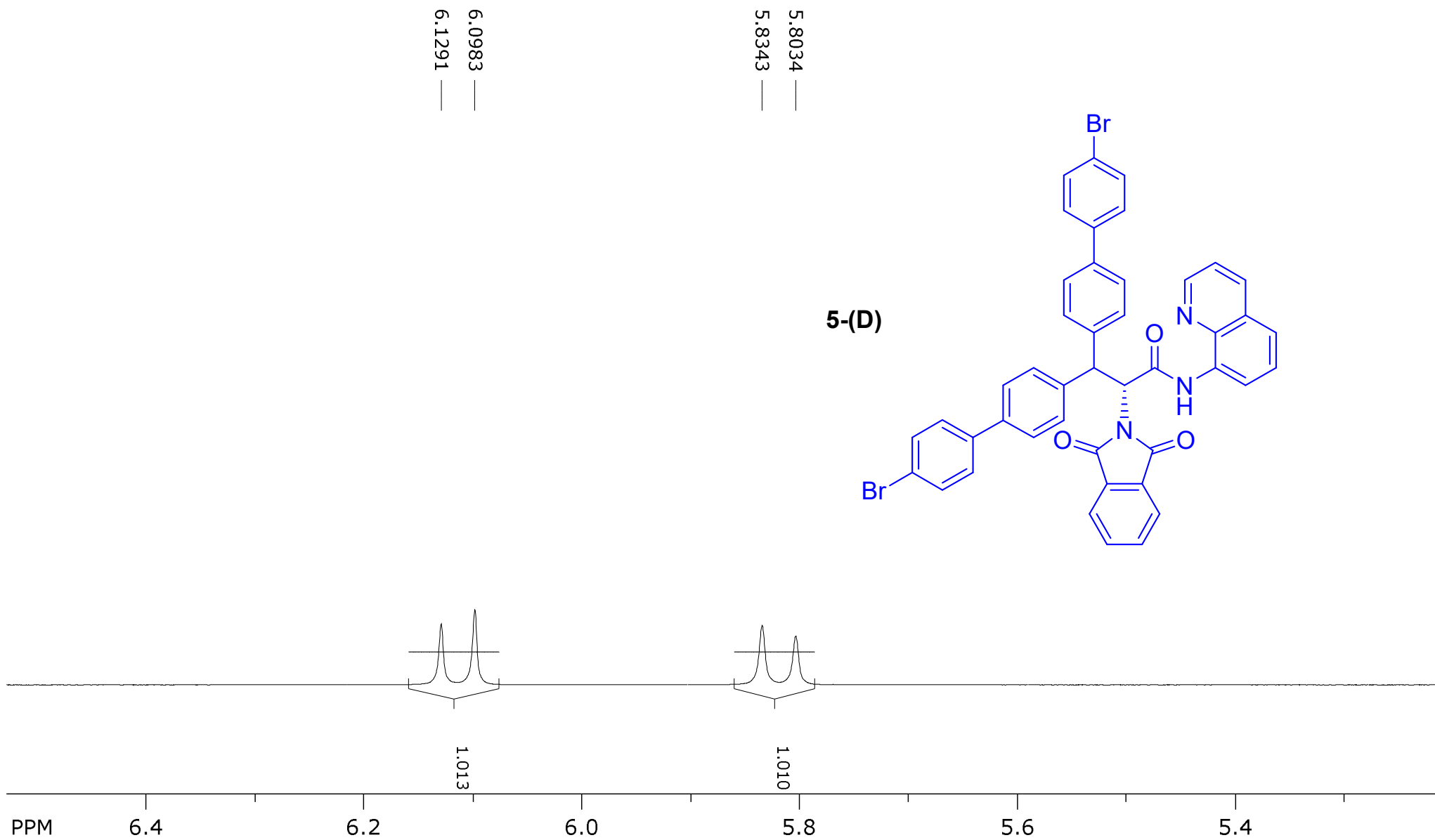


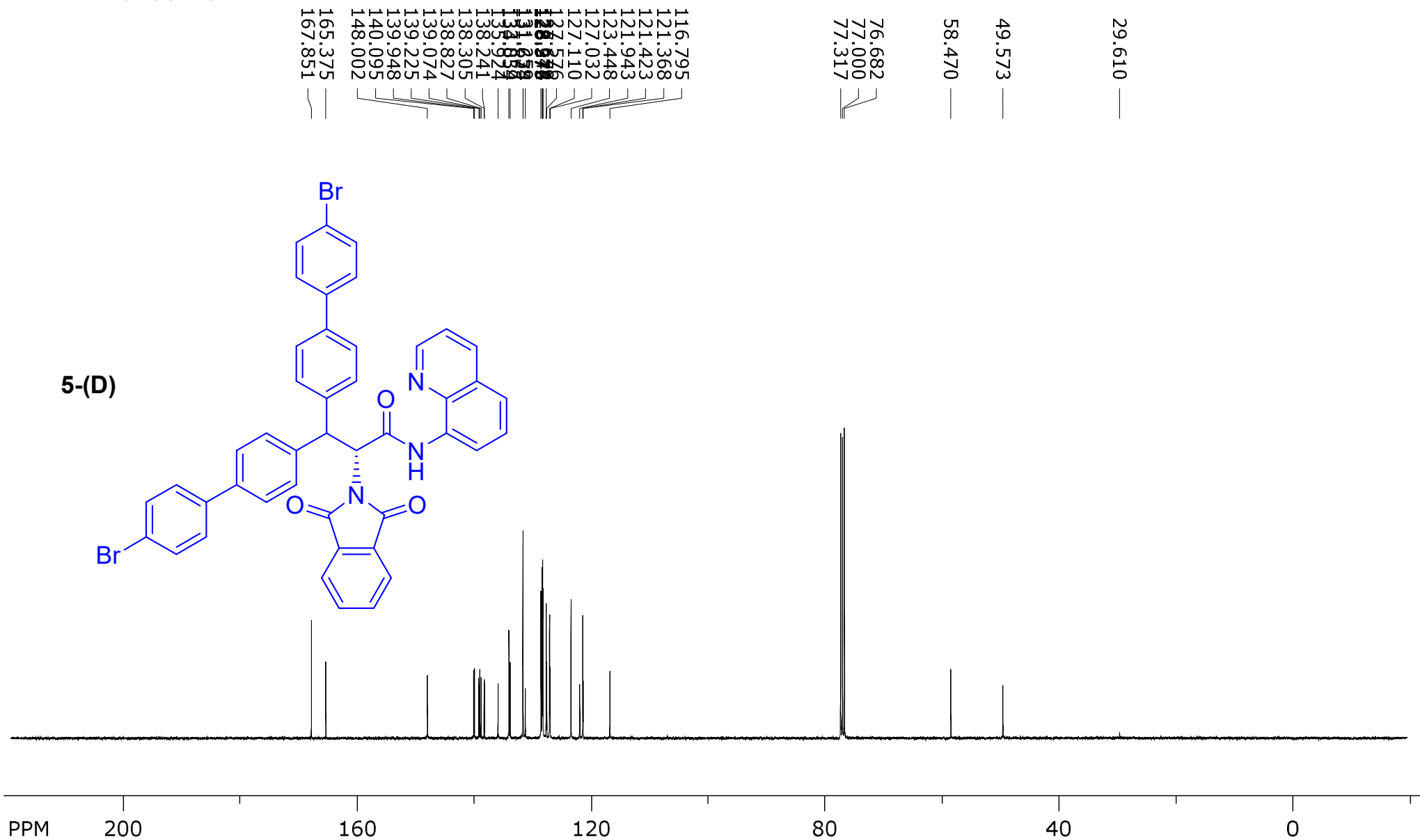


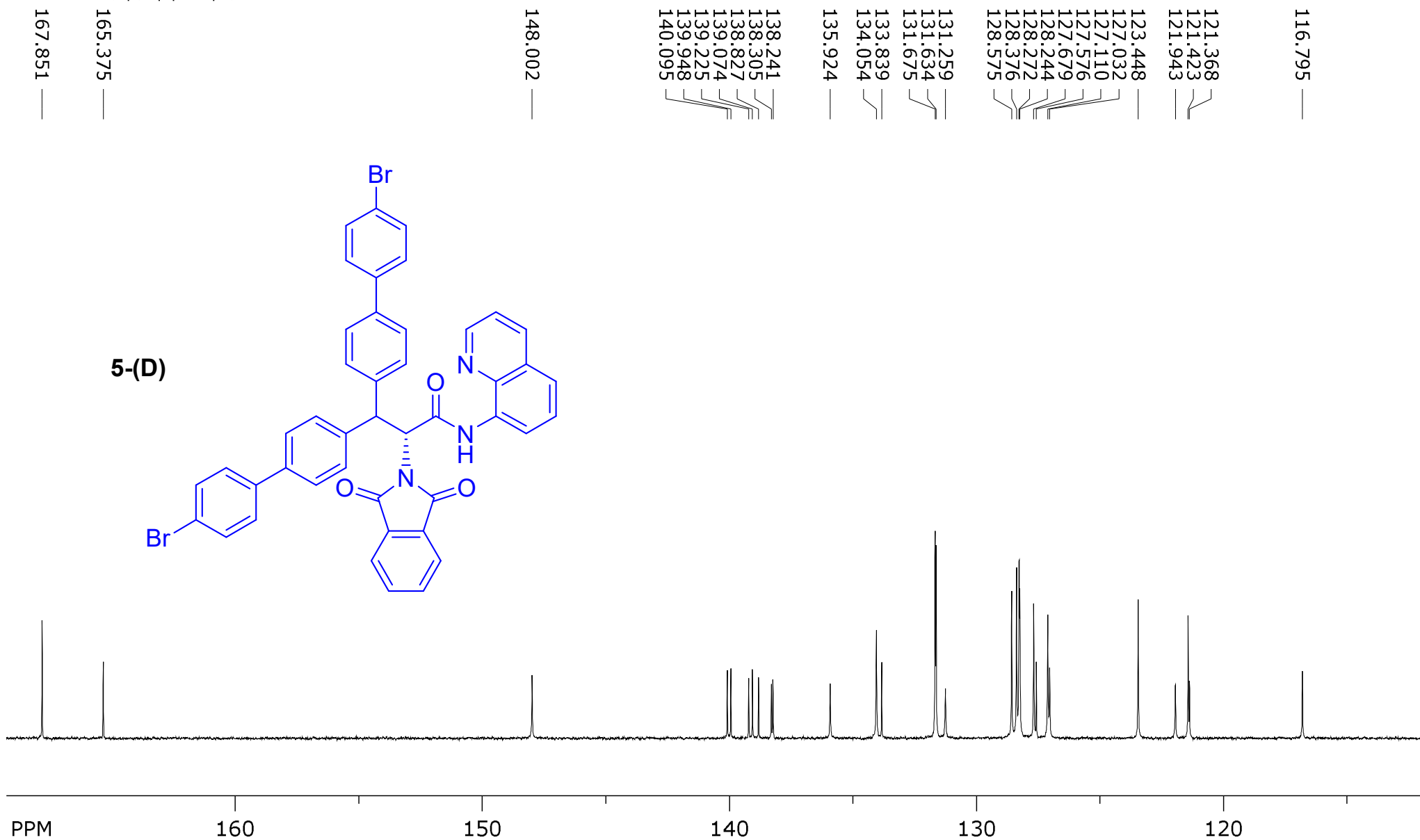
7.7437	7.6159	7.4994	7.2721
7.7645	7.6235	7.5175	7.2755
7.7785	7.6295	7.5276	7.2821
7.7861	7.6371	7.4787	7.2930
7.7921		7.4690	7.2964
7.7997		7.4523	7.3042
		7.4419	7.3152
		7.4213	7.3253
		7.4007	7.3359

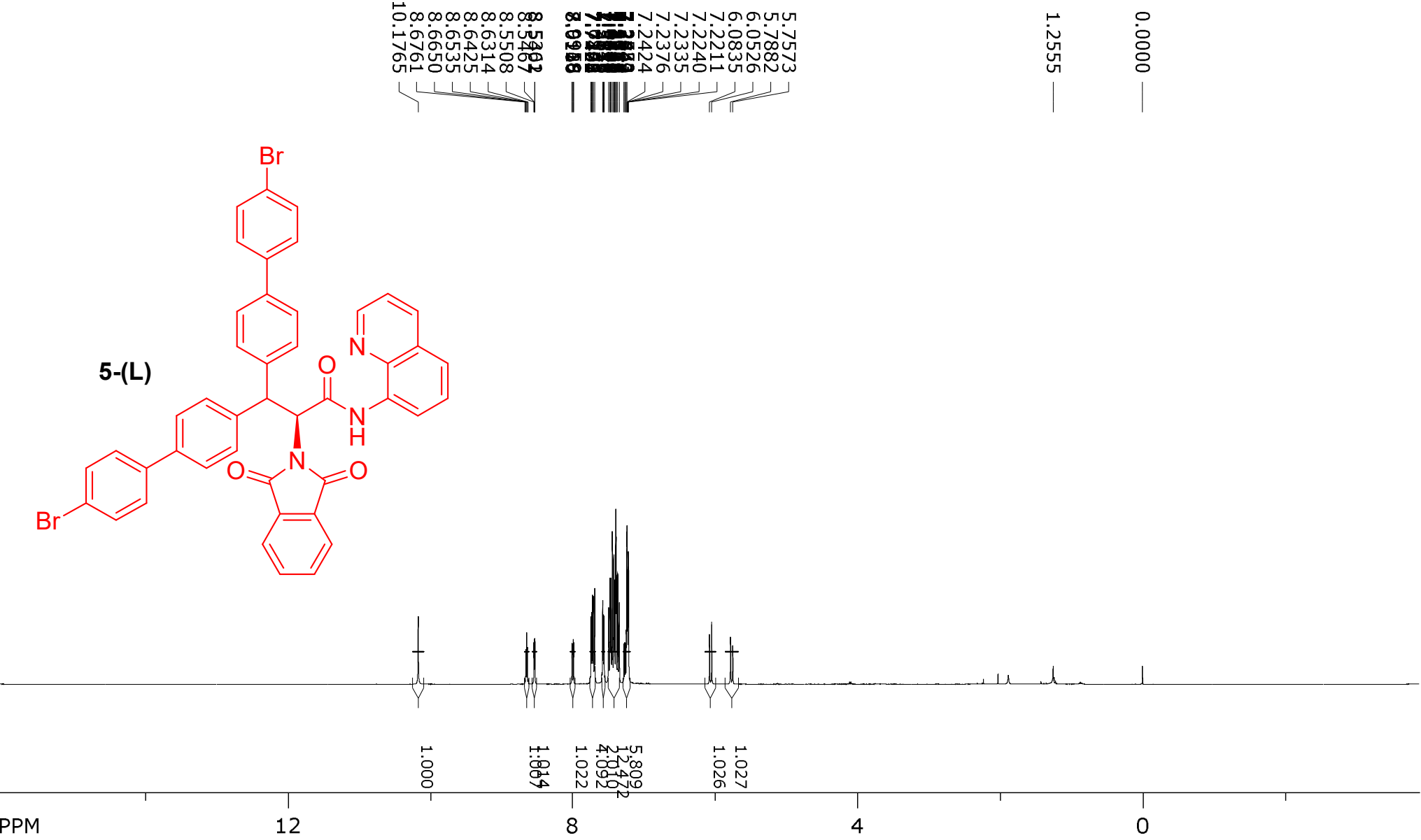
5-(D)

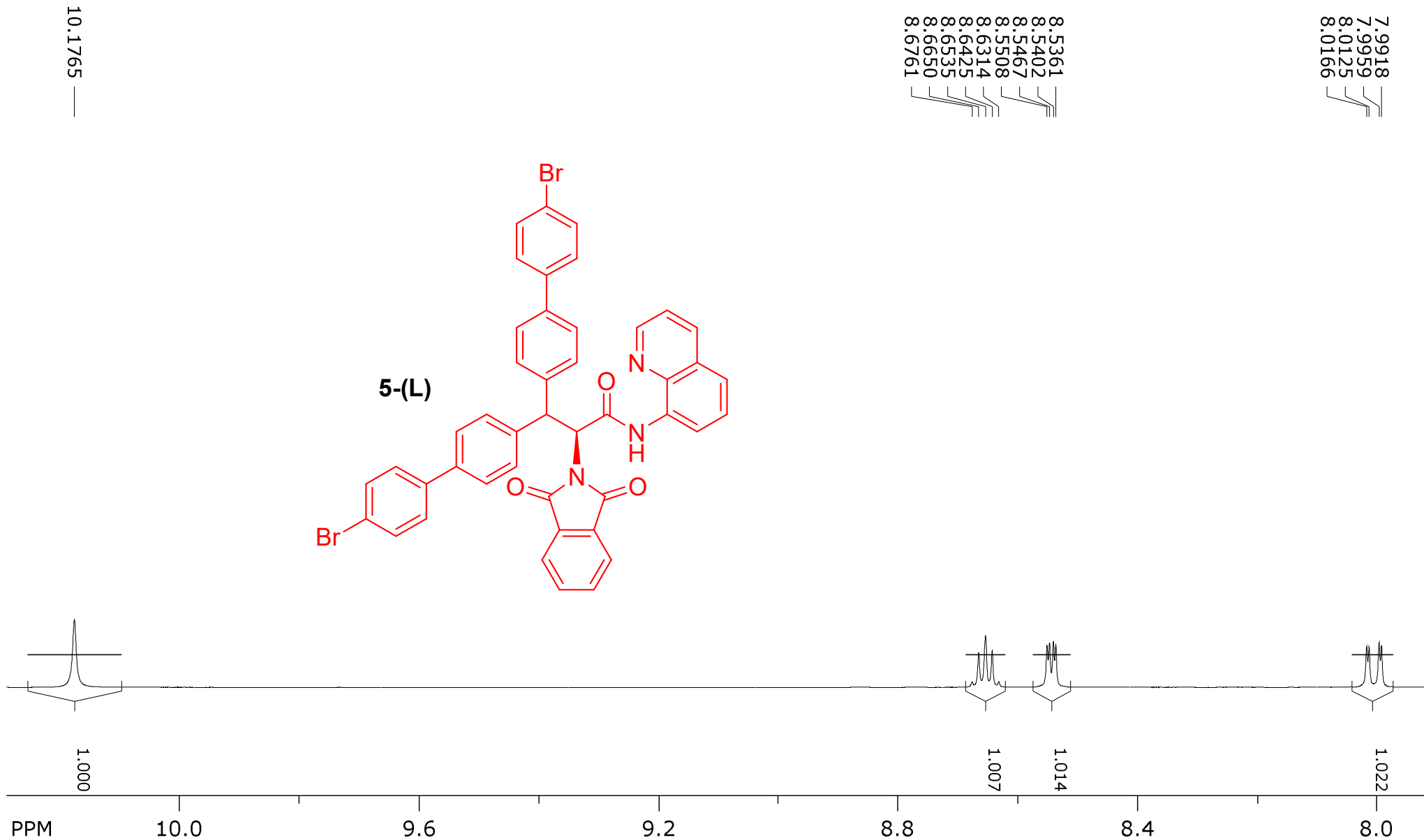


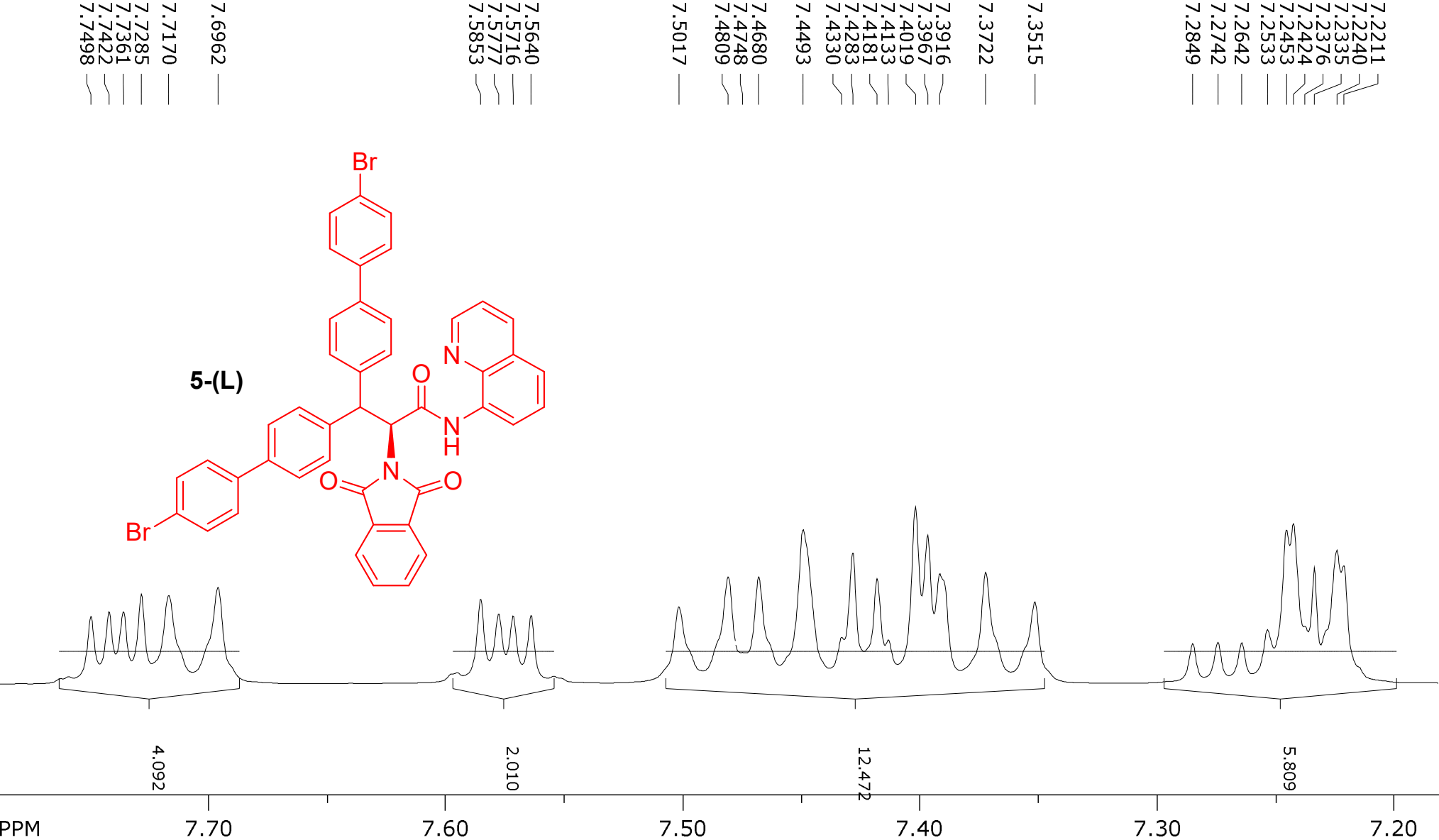


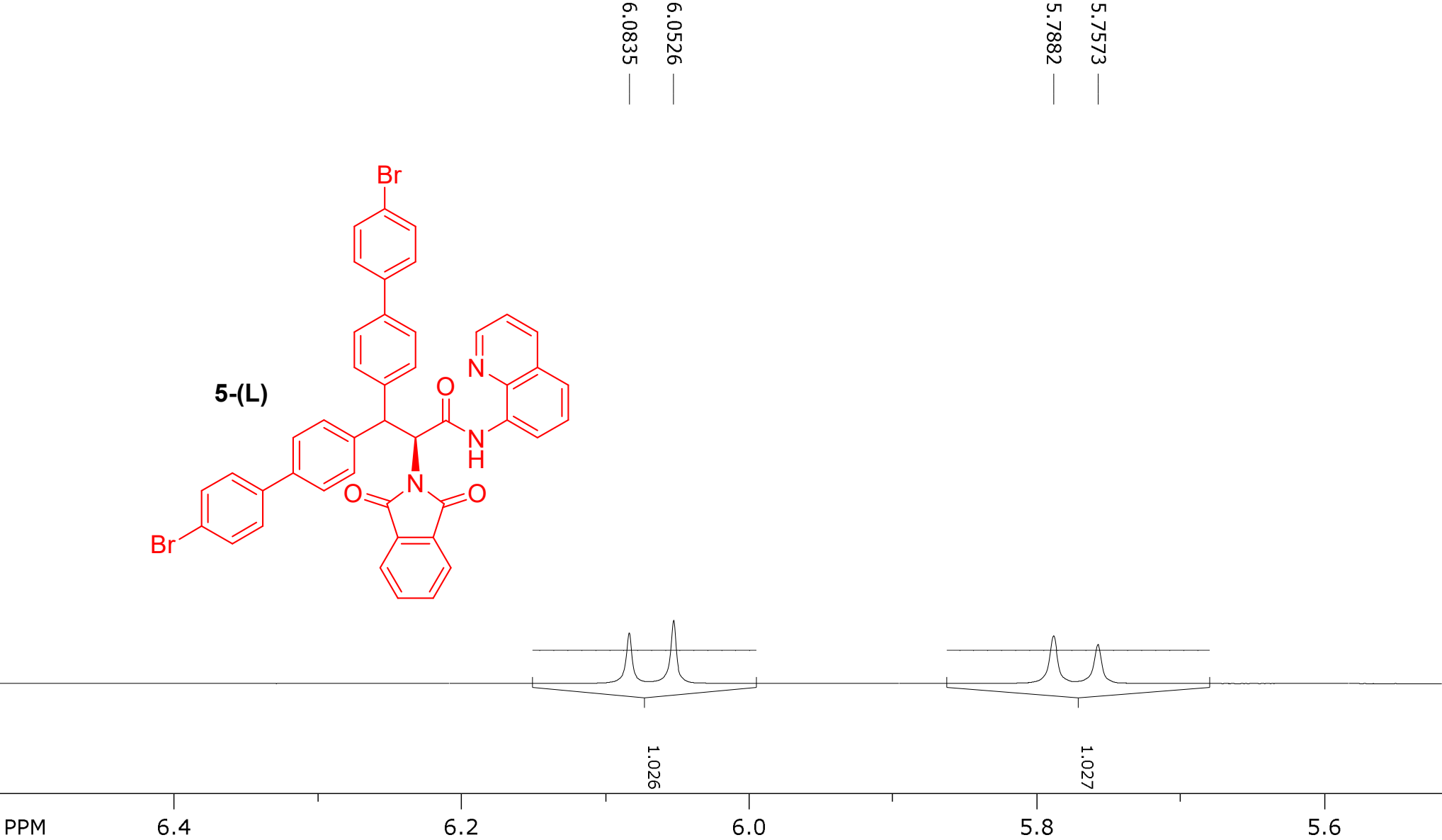
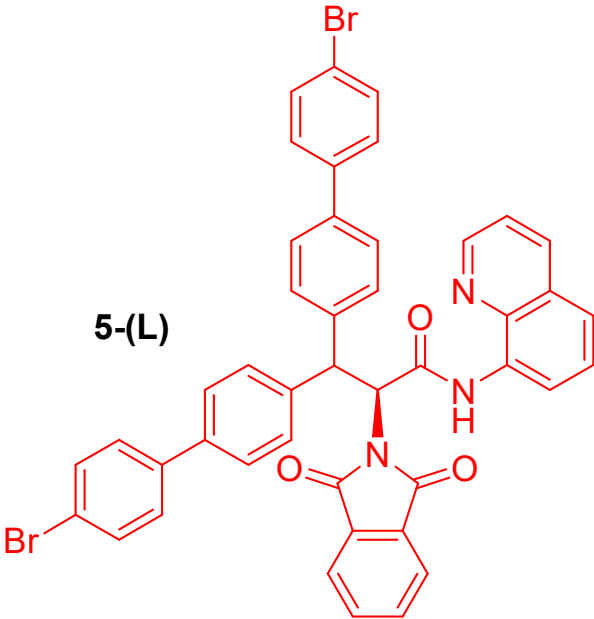


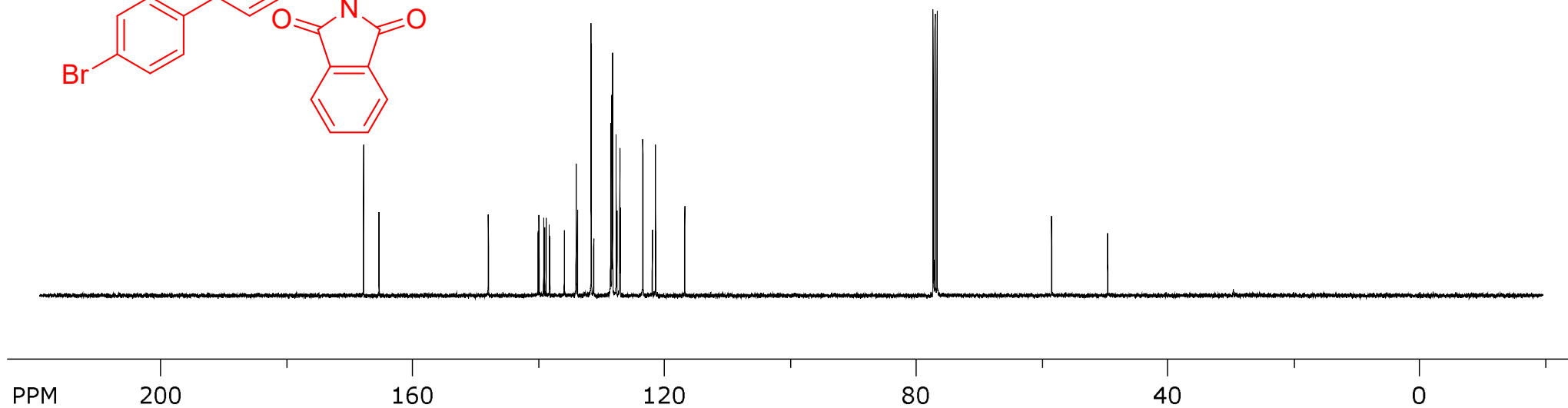
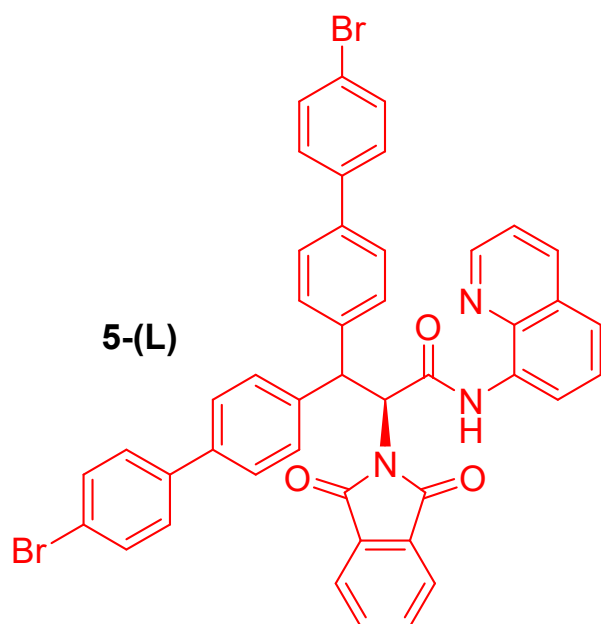


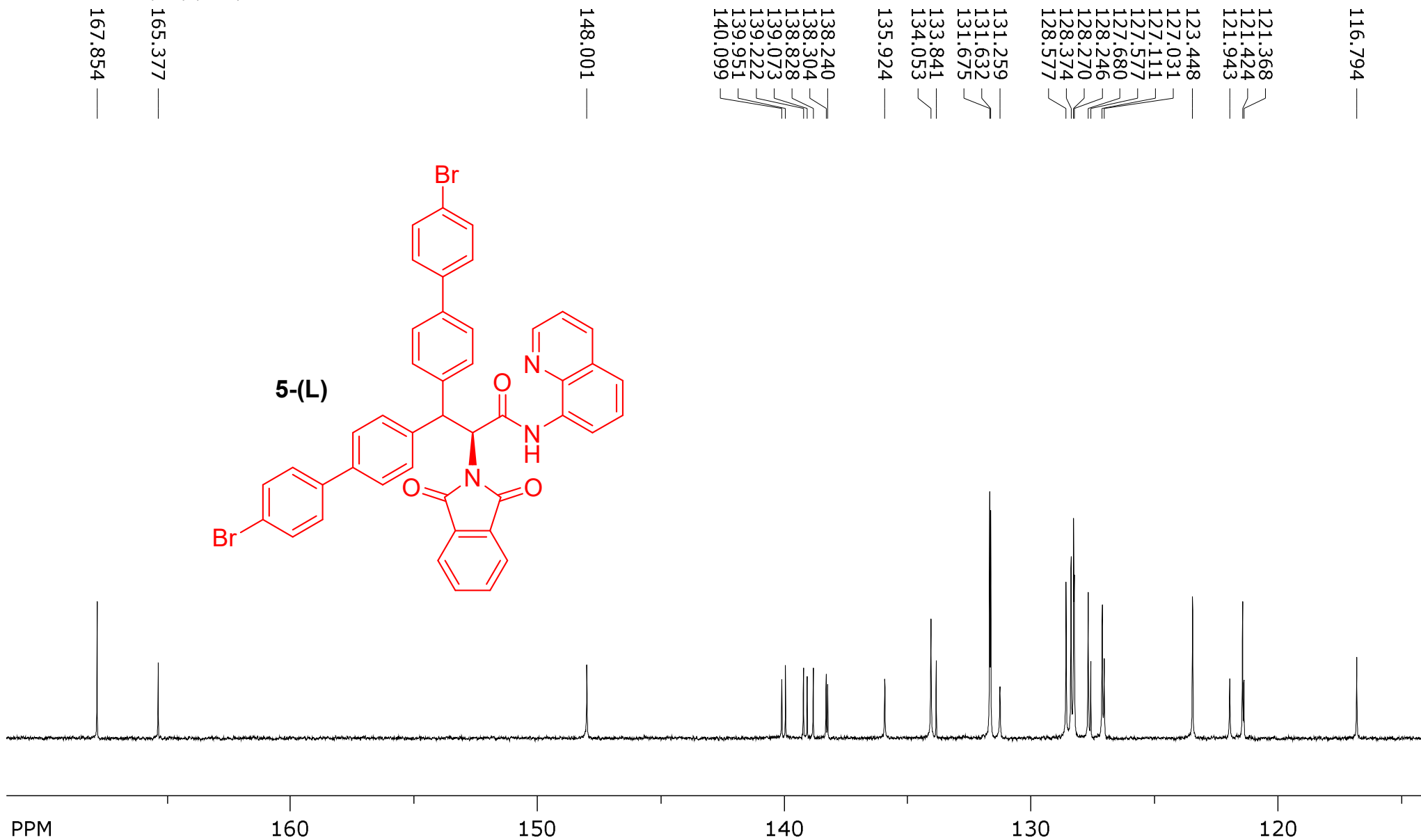
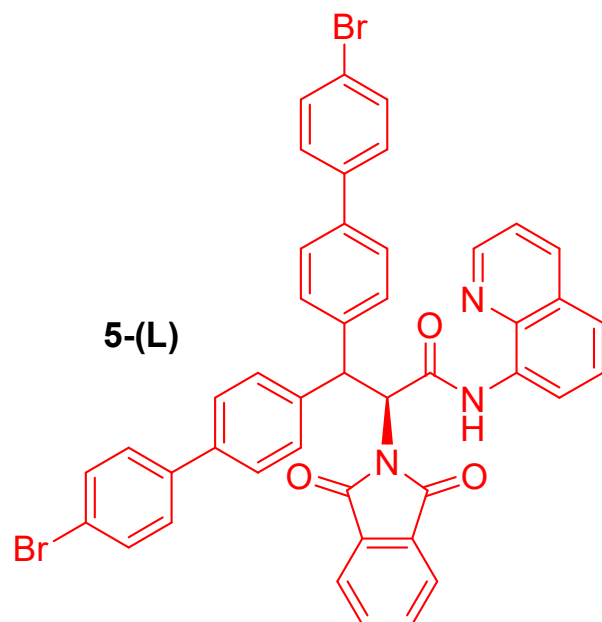


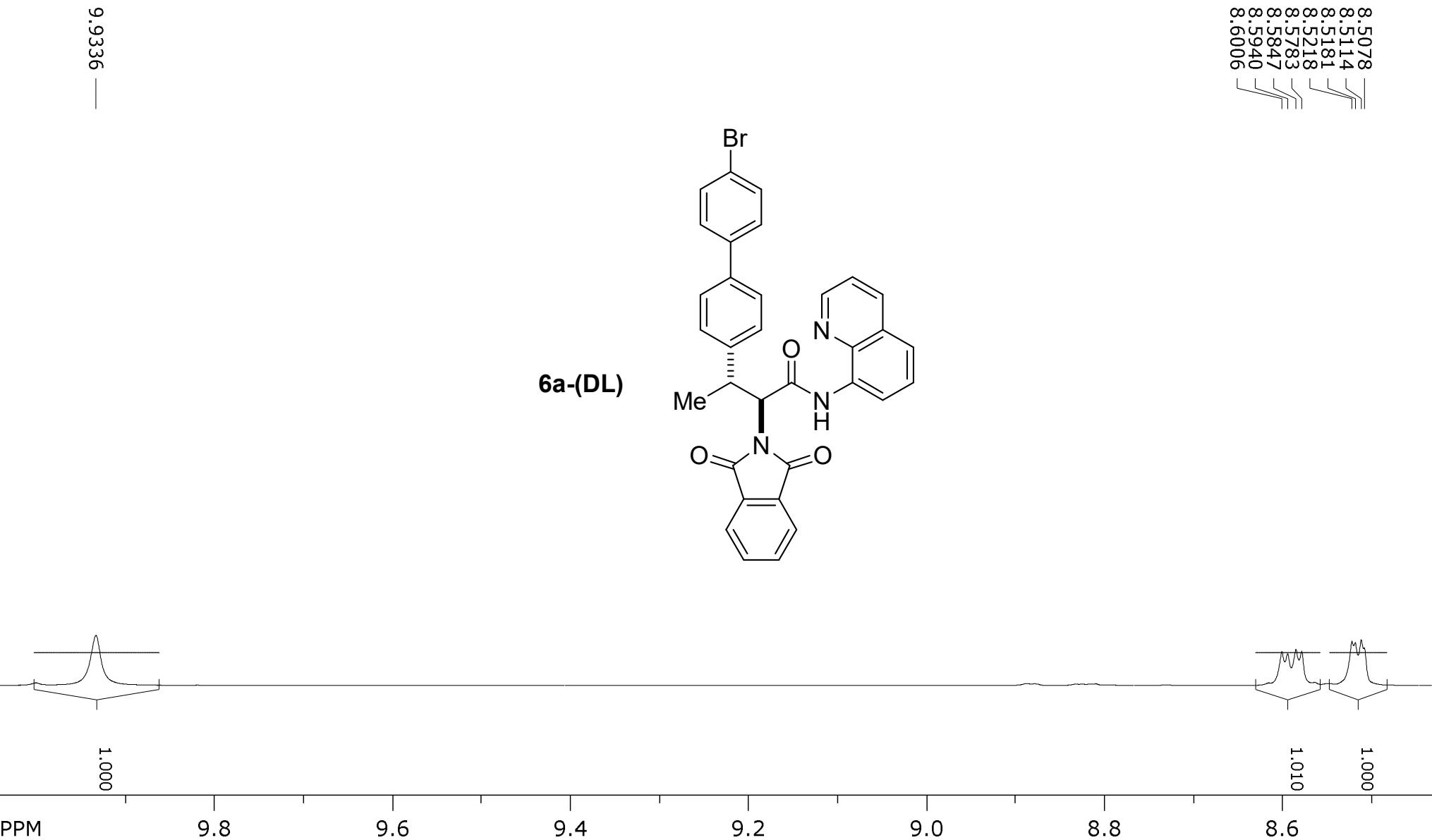


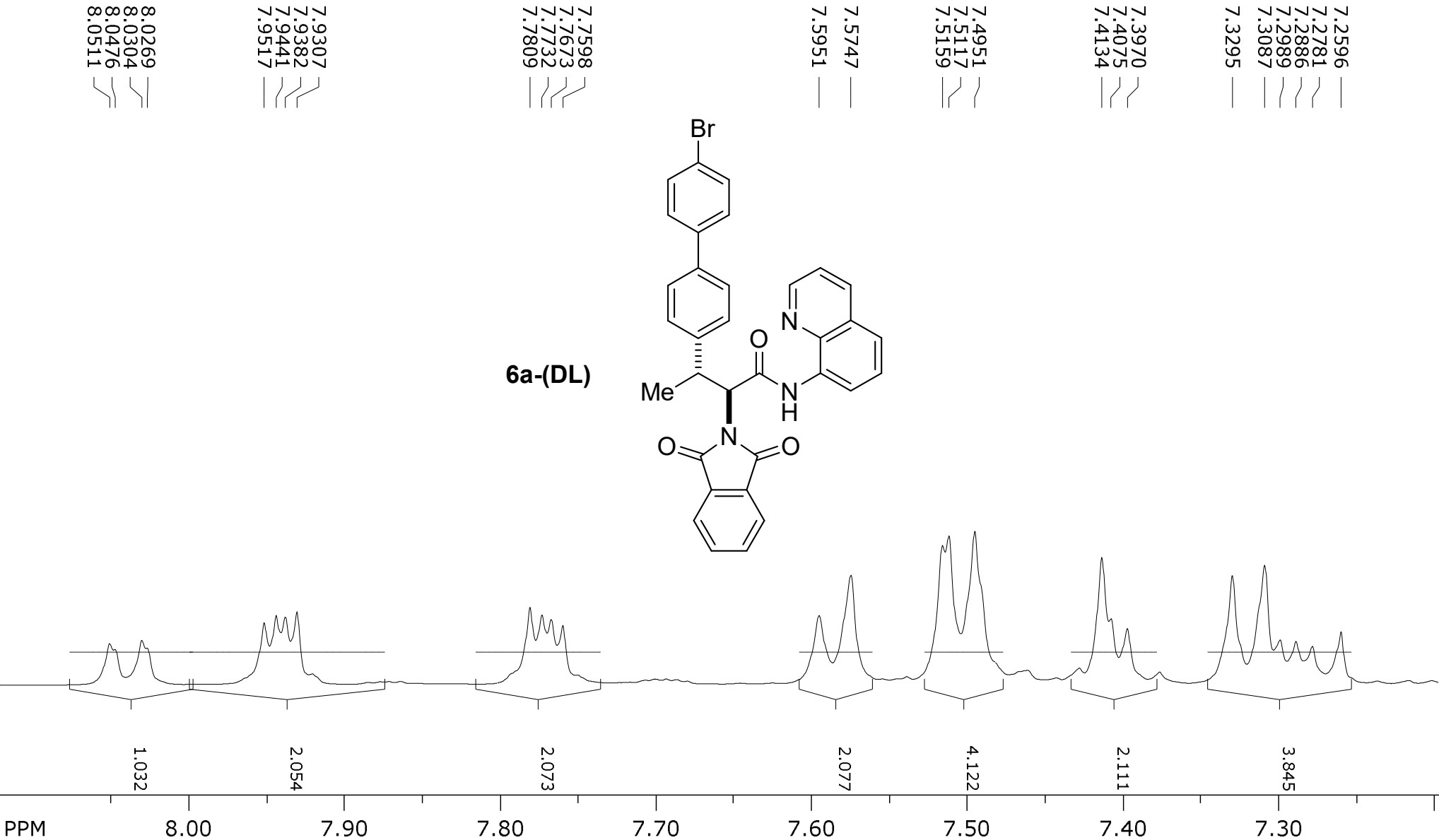


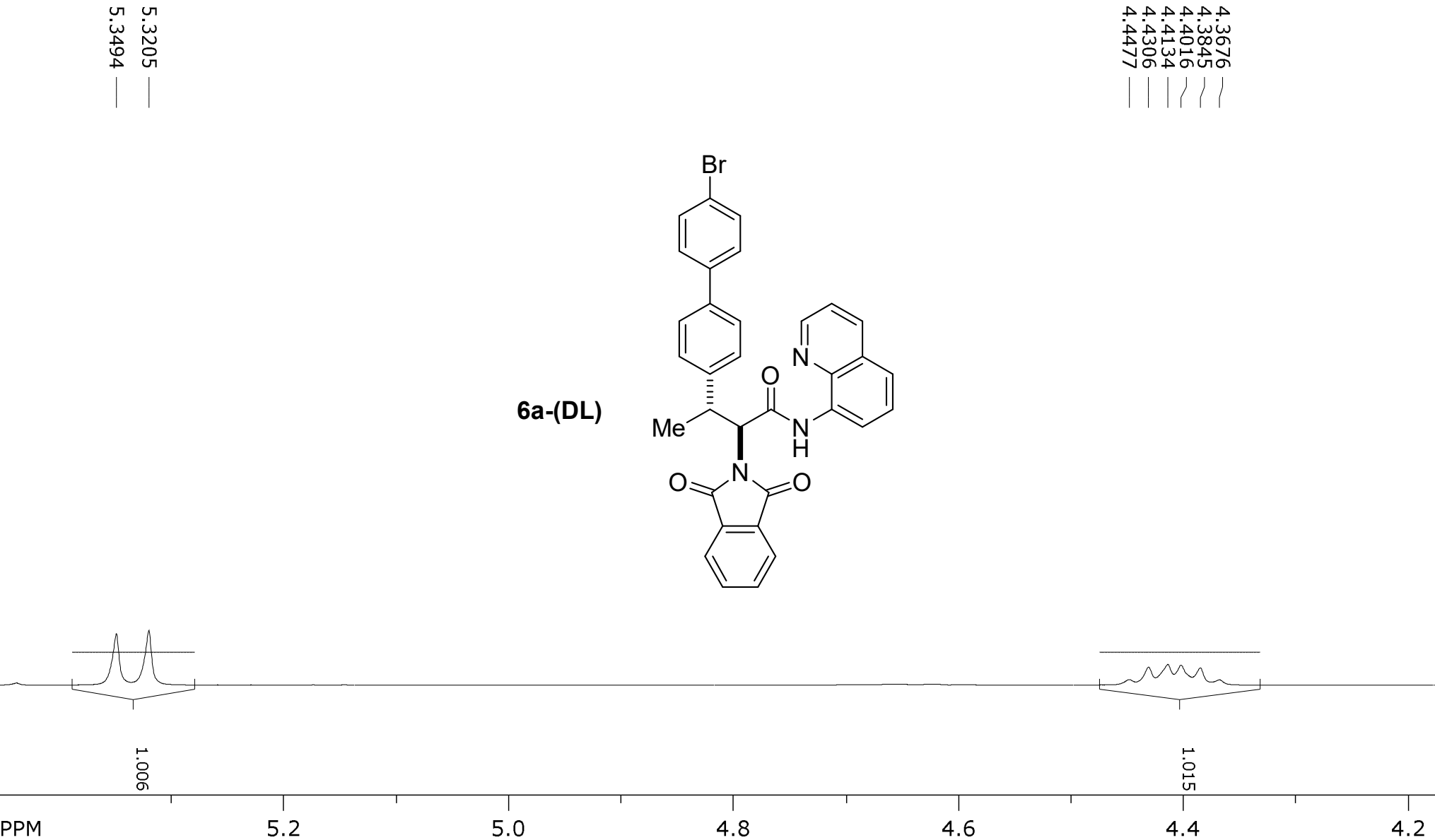


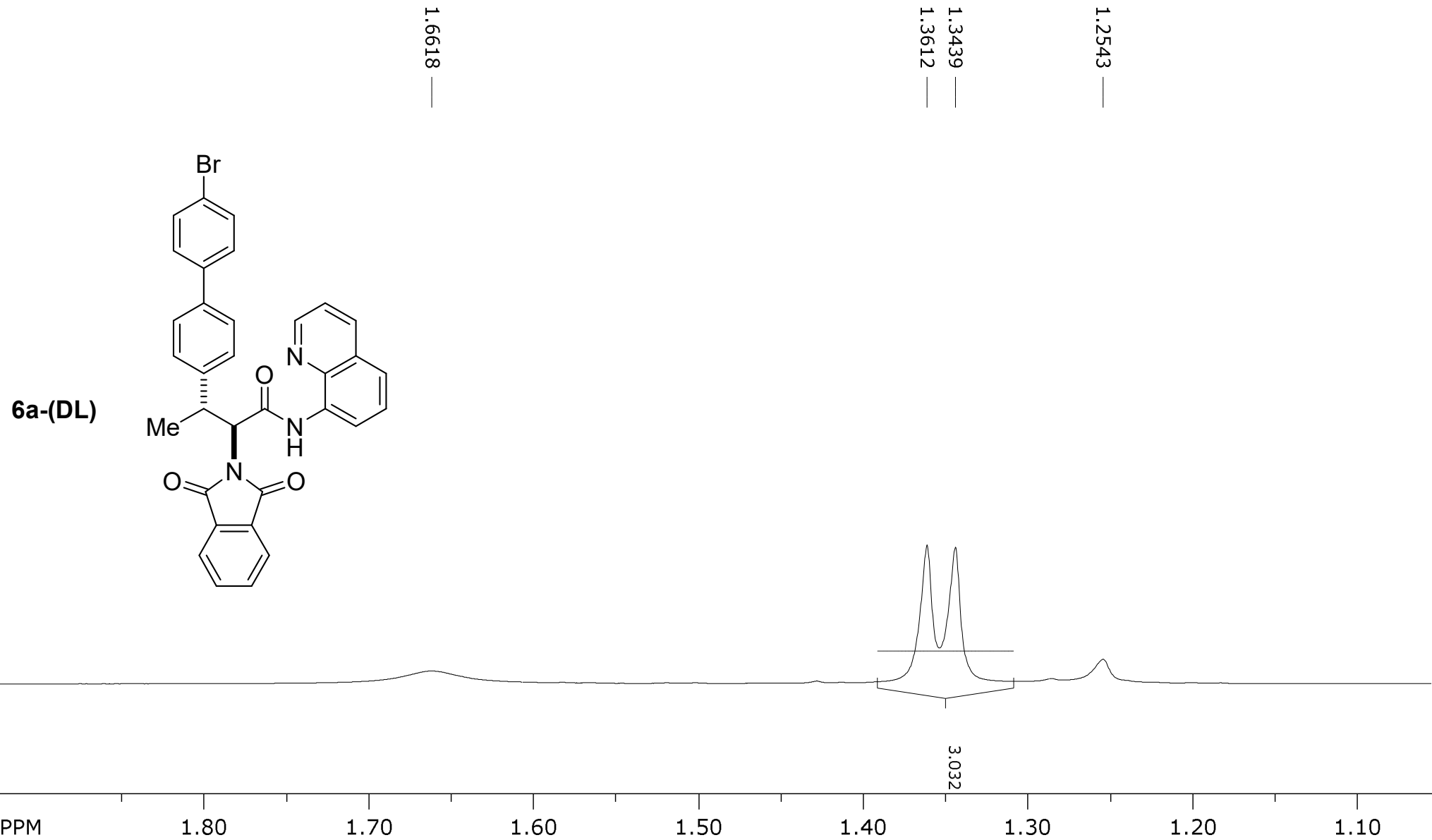


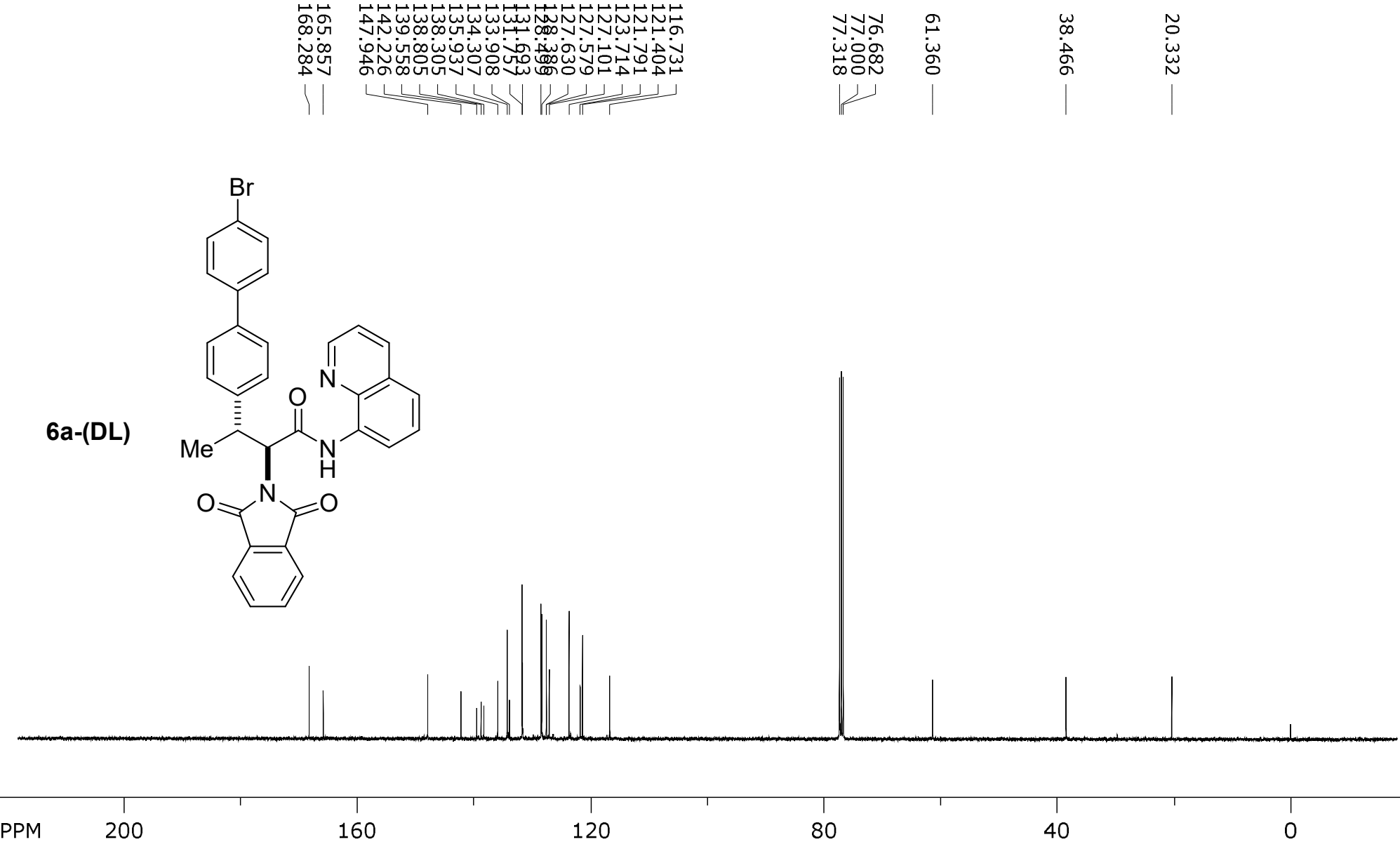


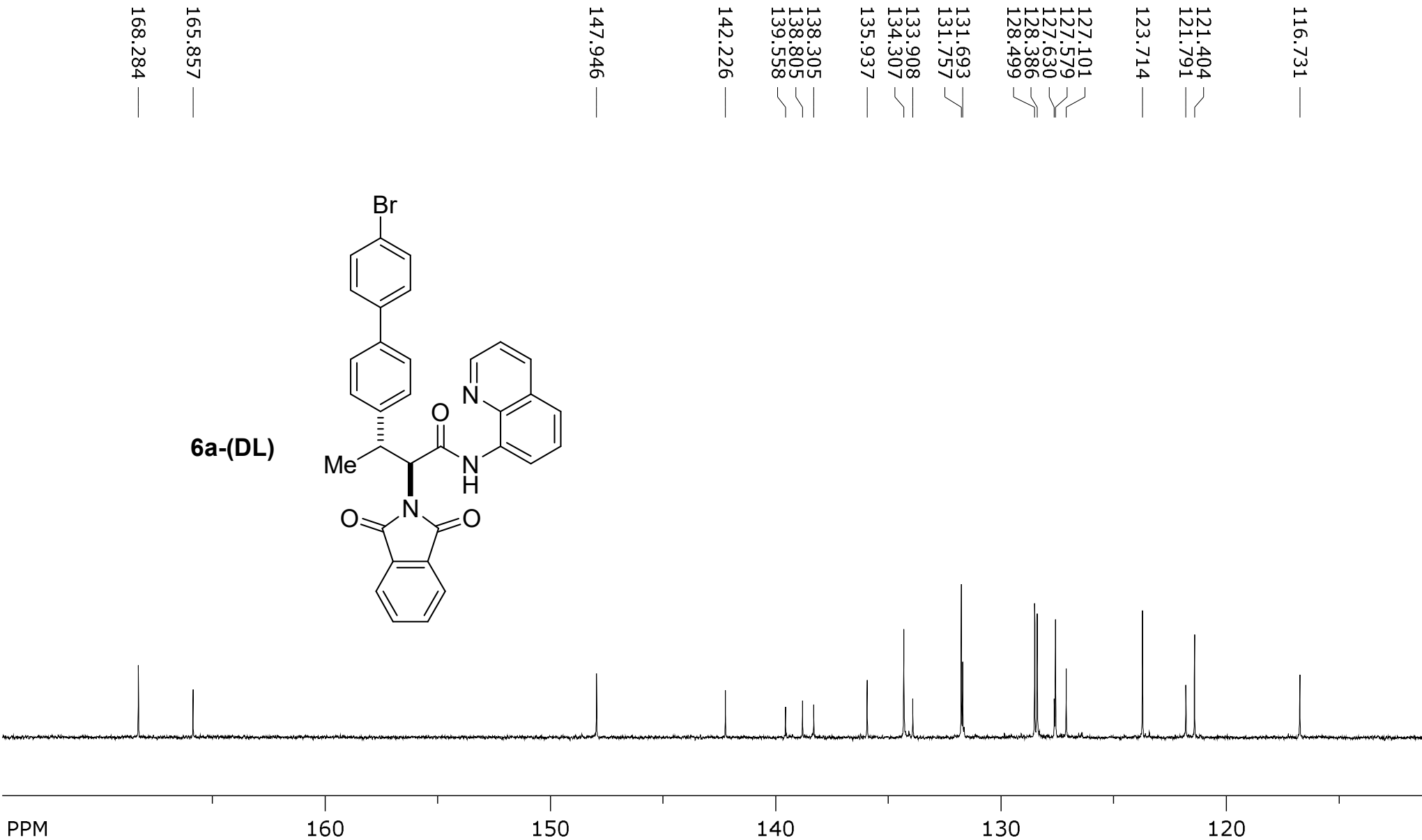


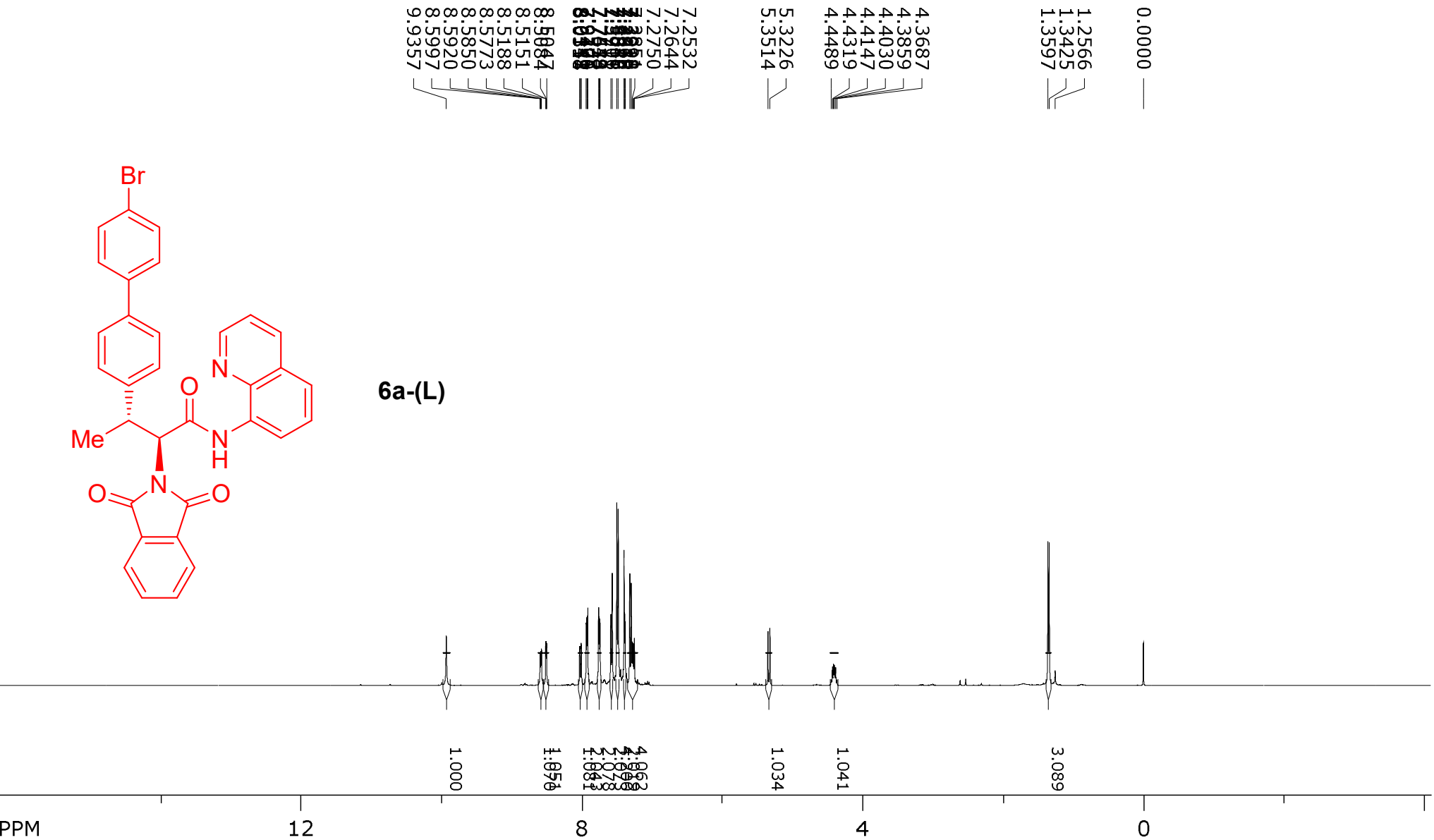


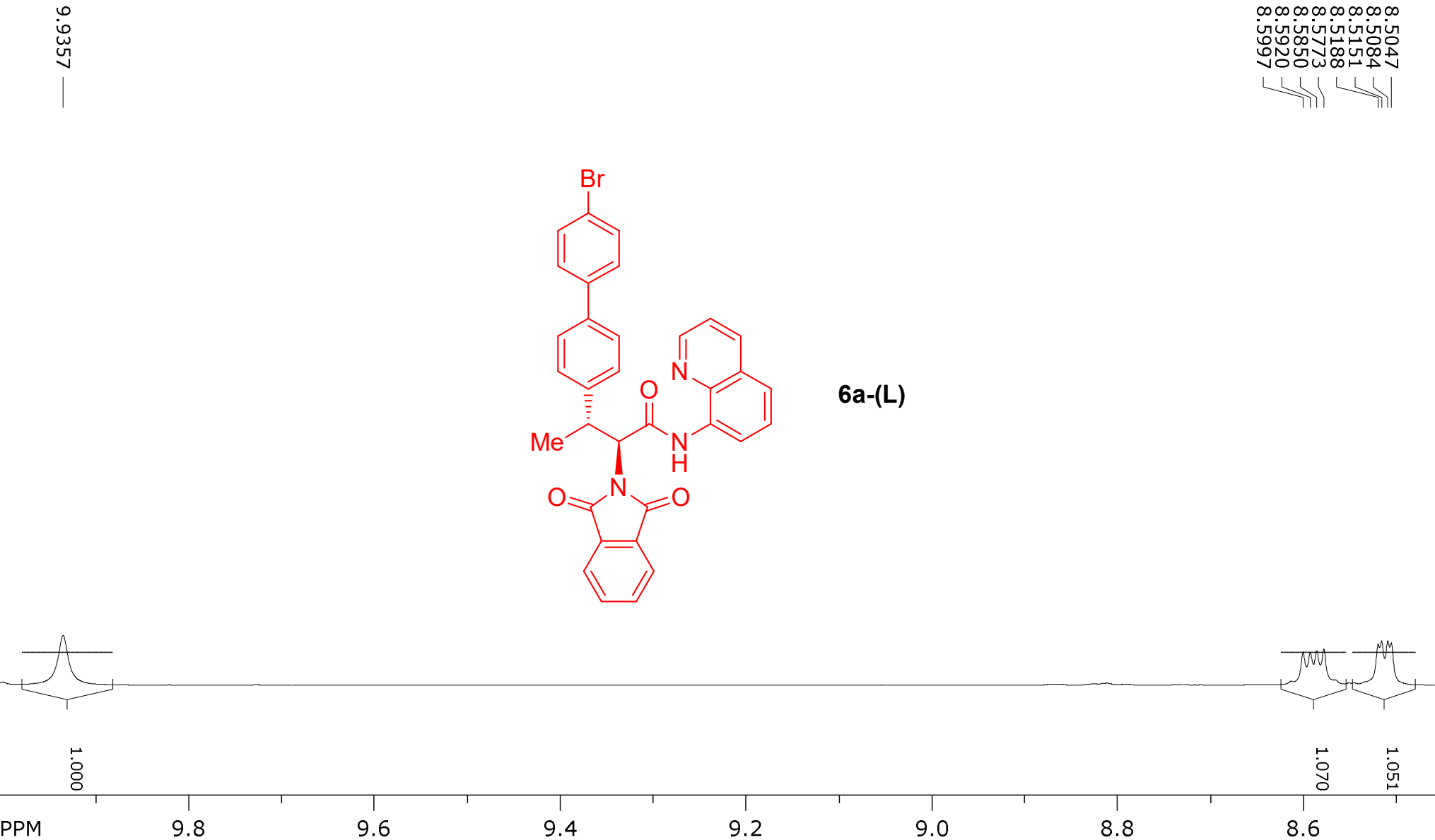


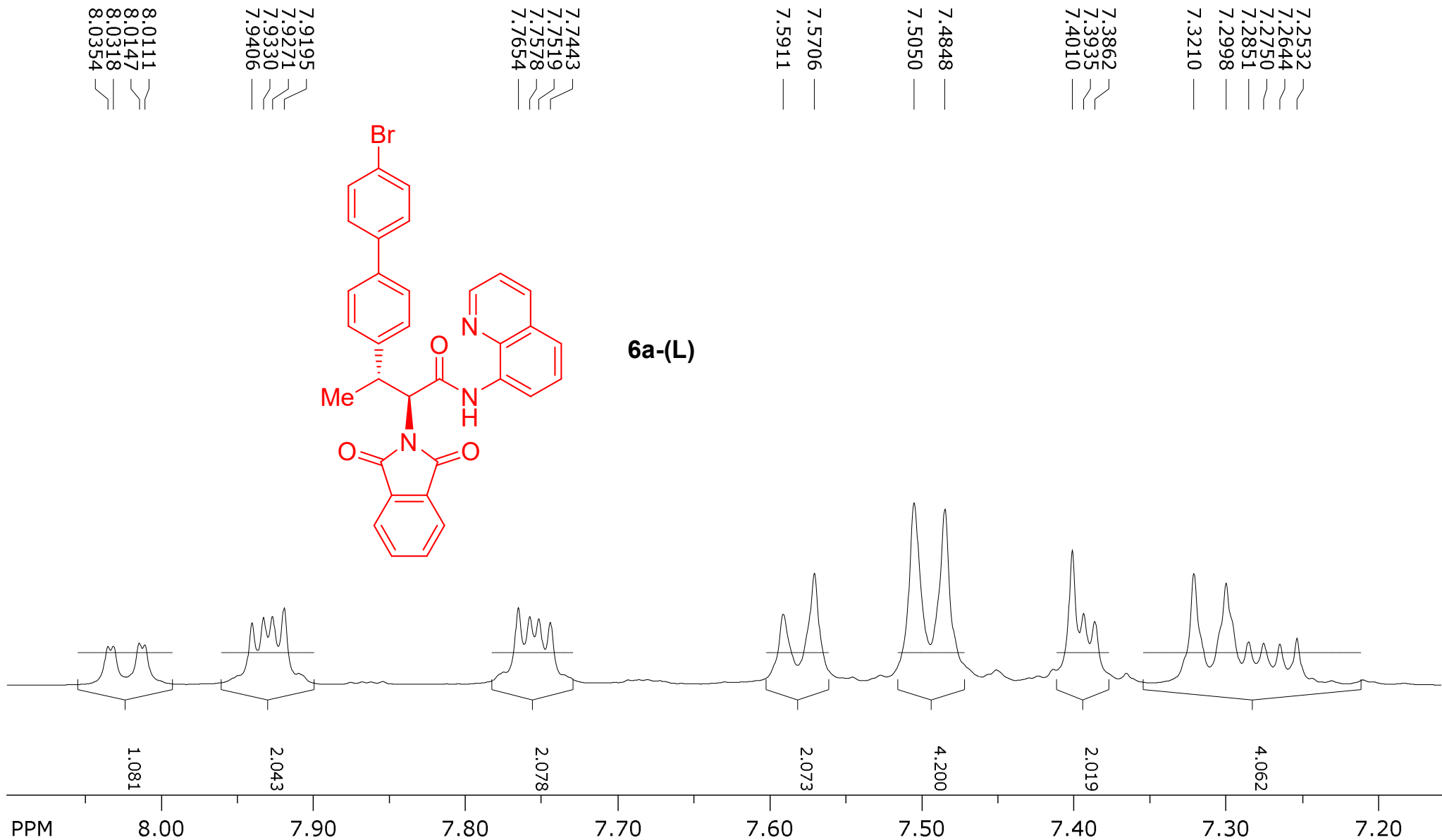






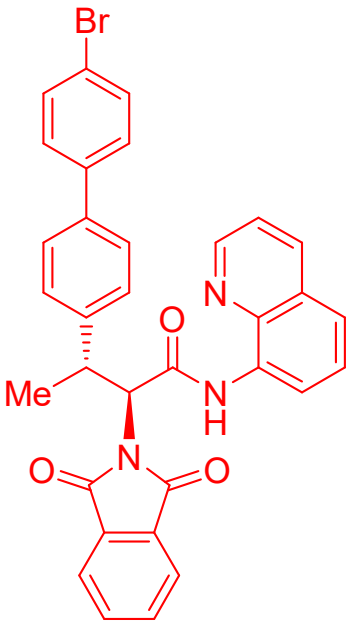




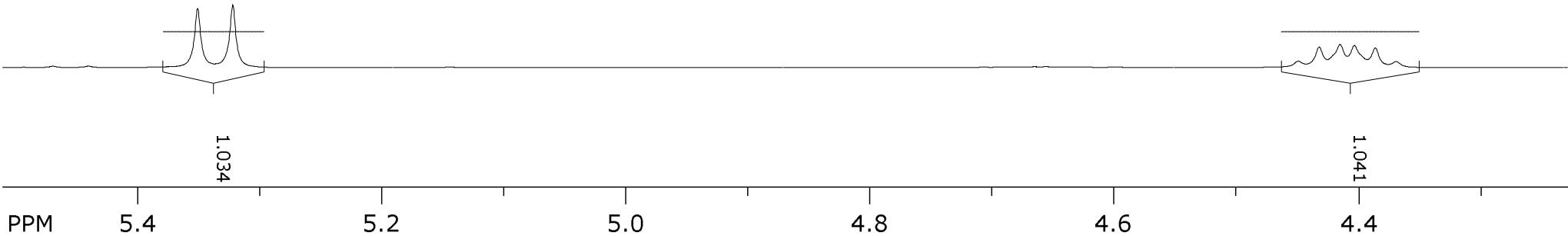


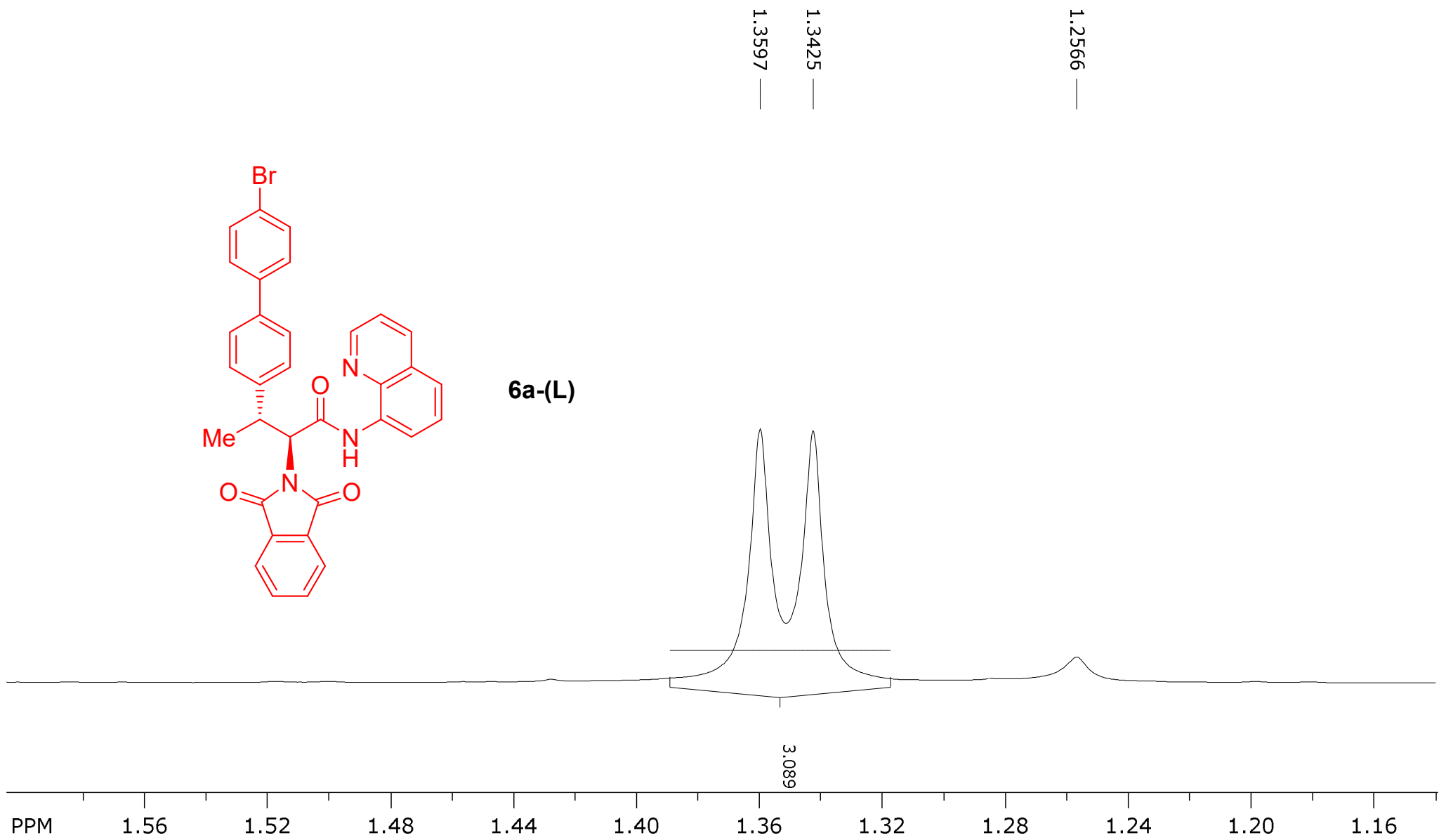
5.3226
5.3514

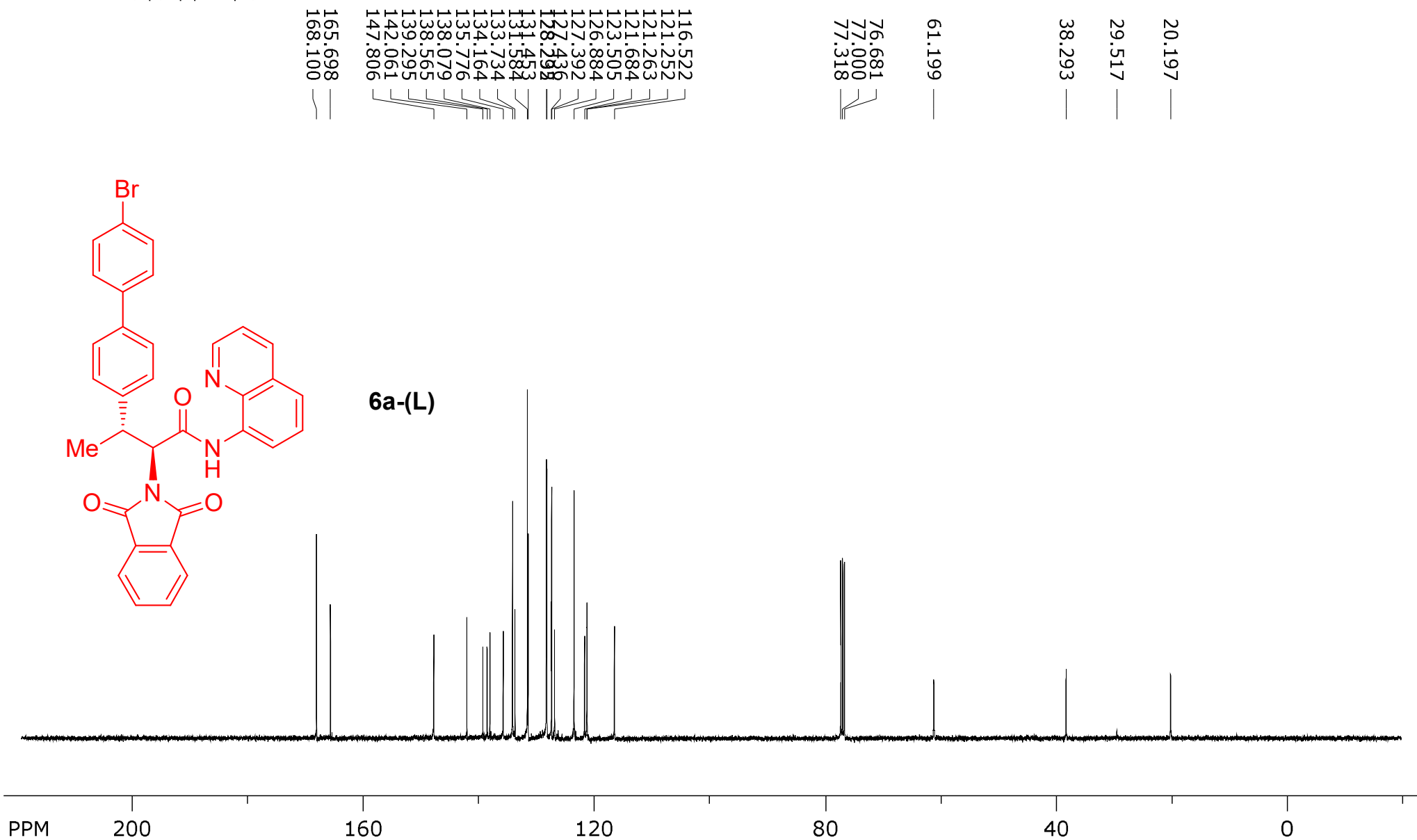
4.3687
4.3859
4.4030
4.4147
4.4319
4.4489

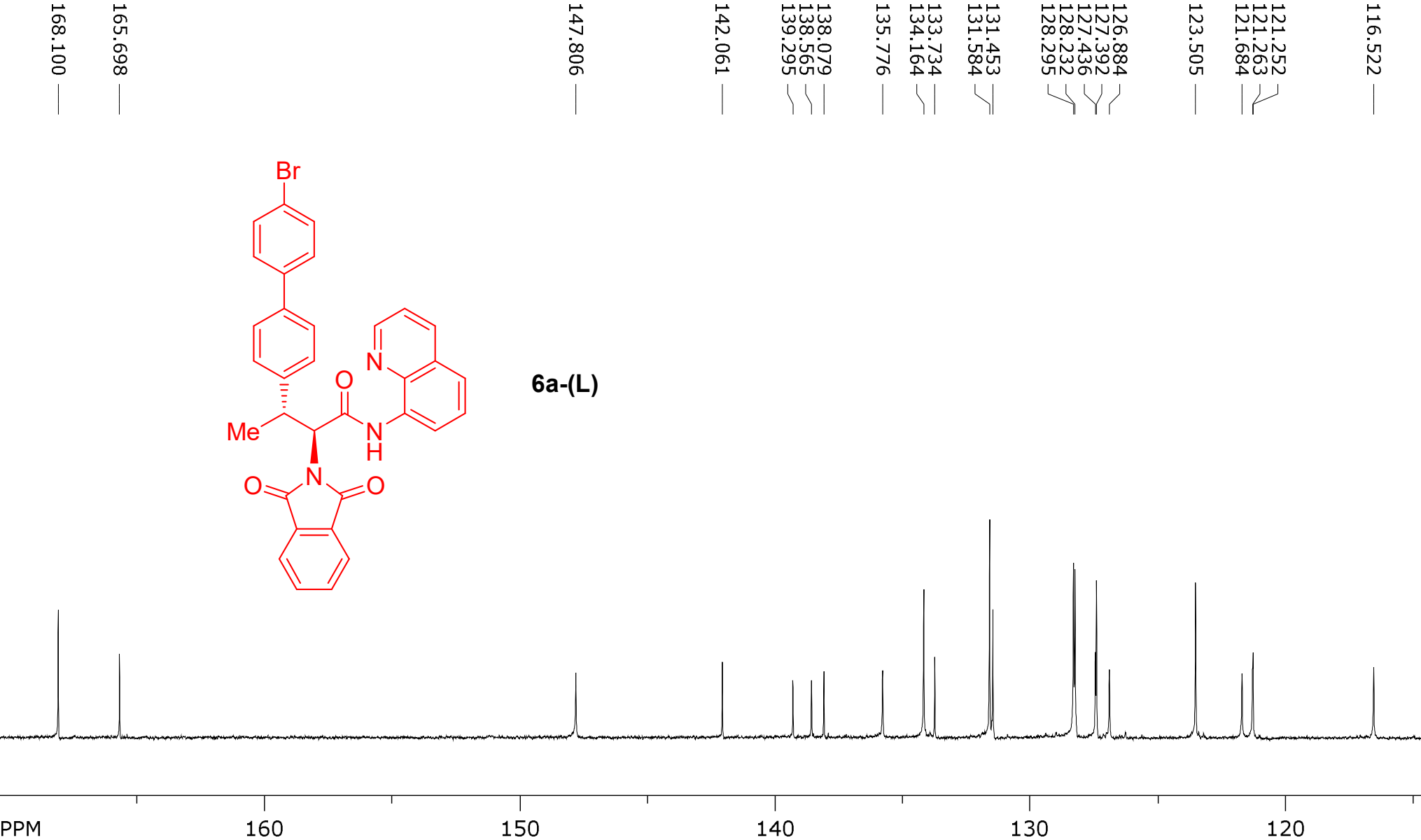


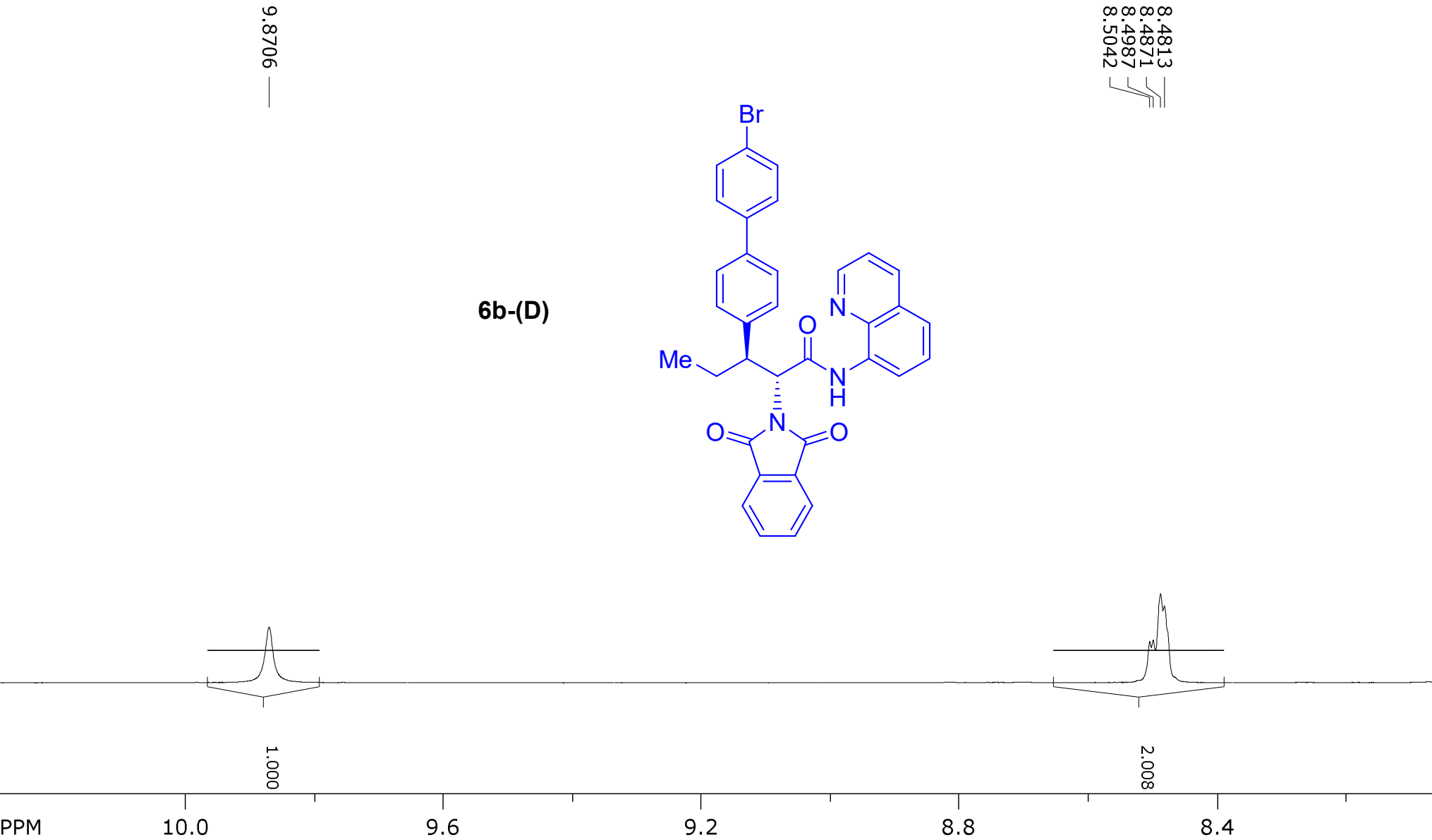
6a-(L)

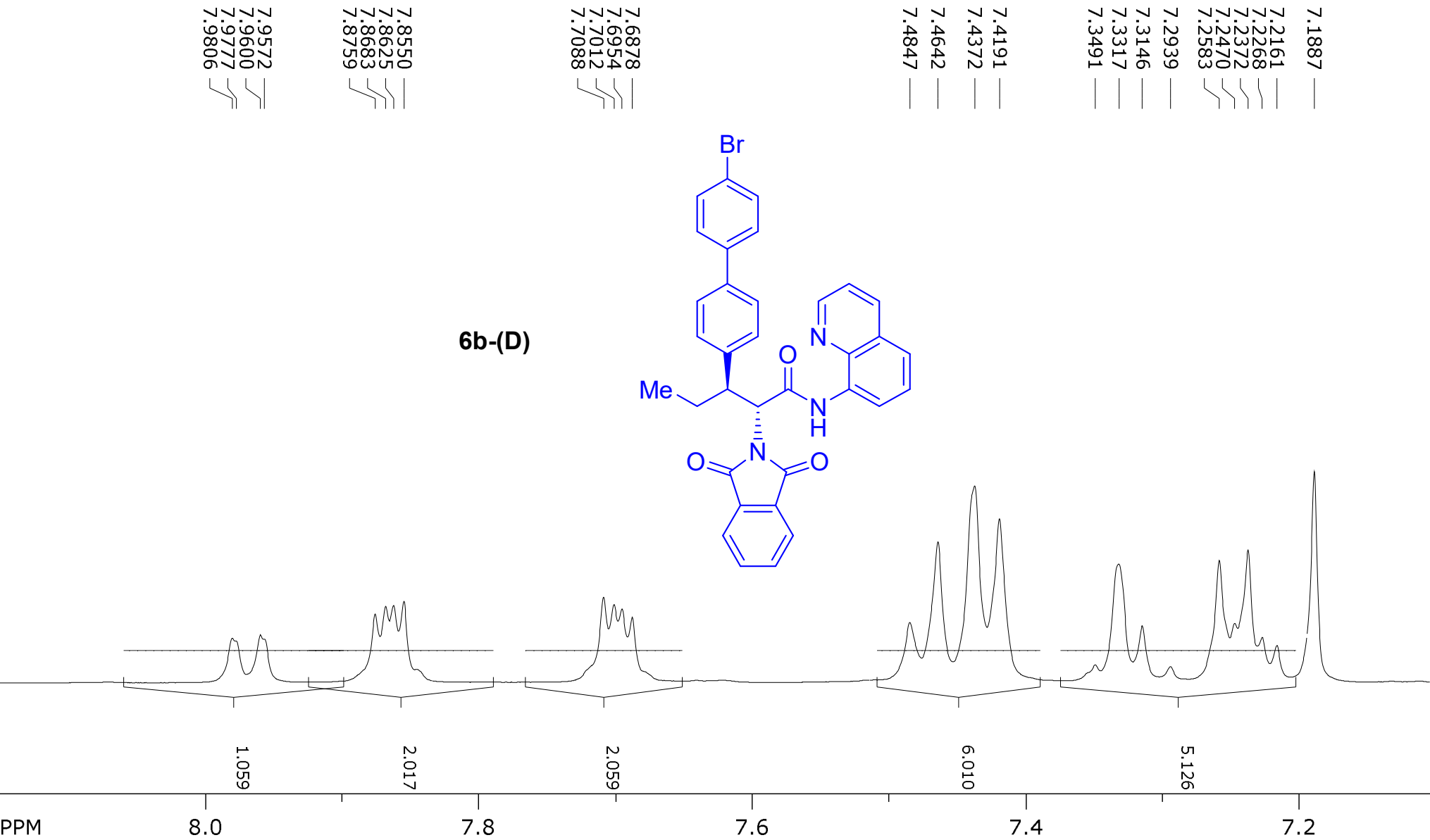


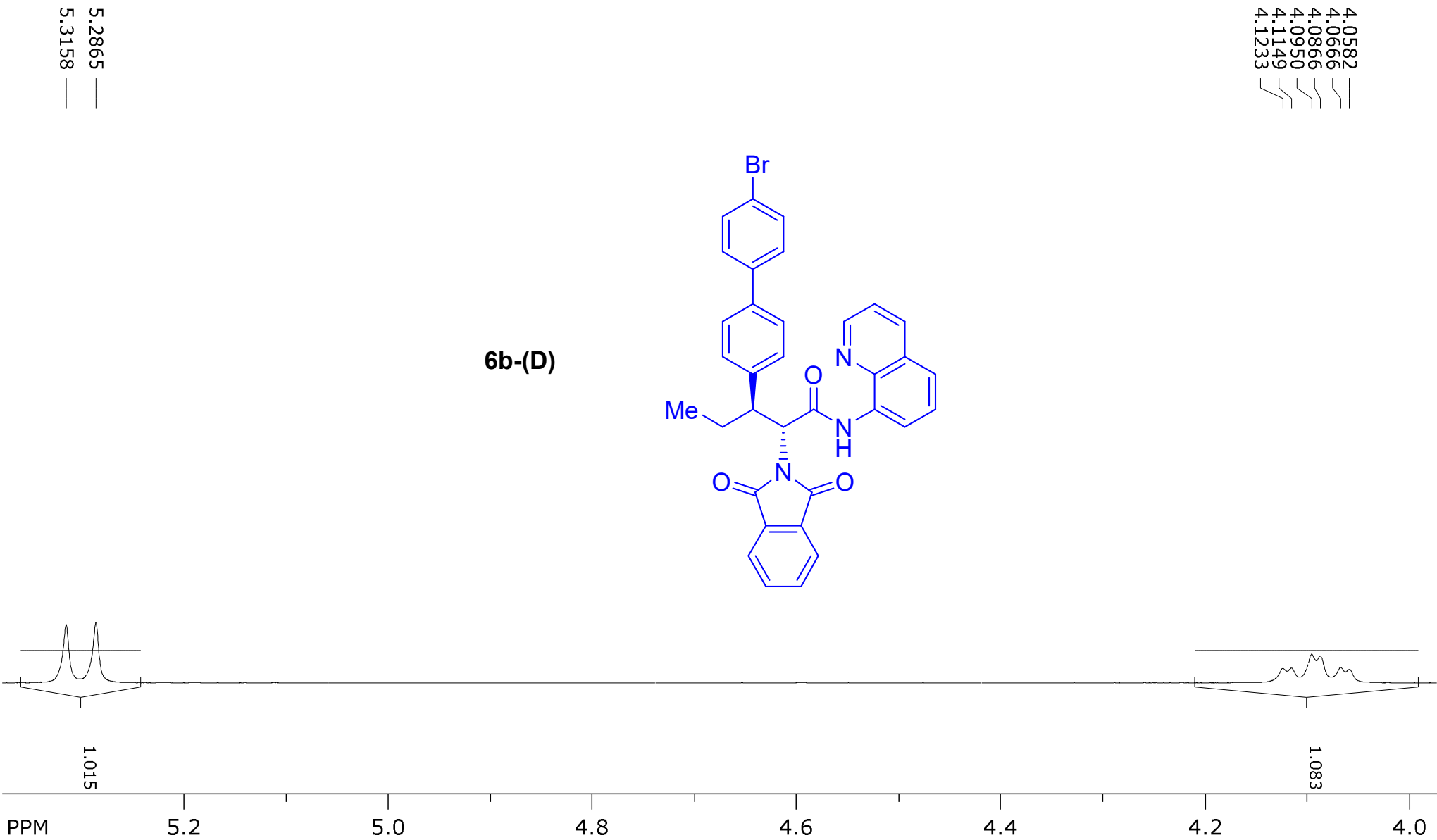


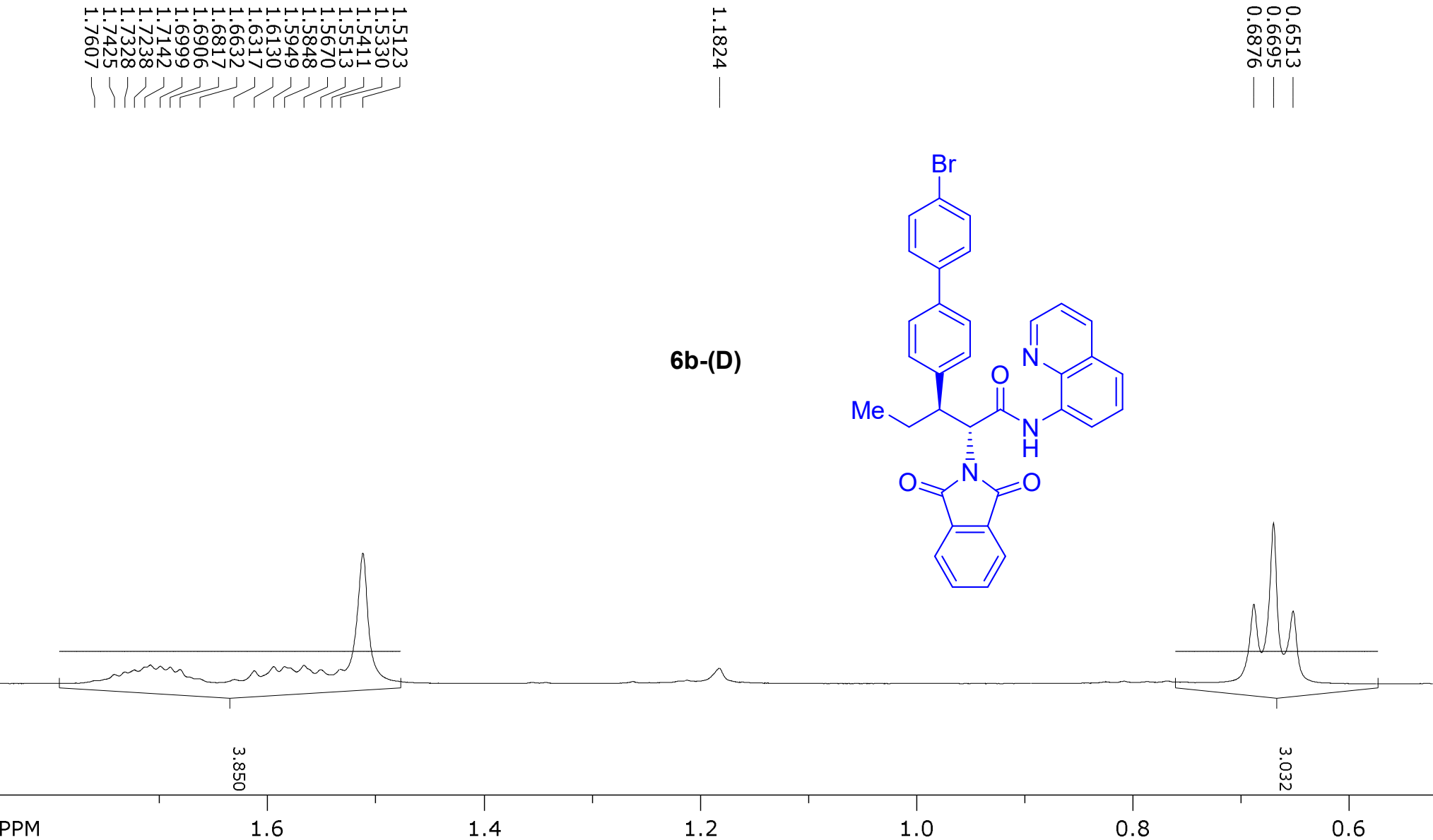


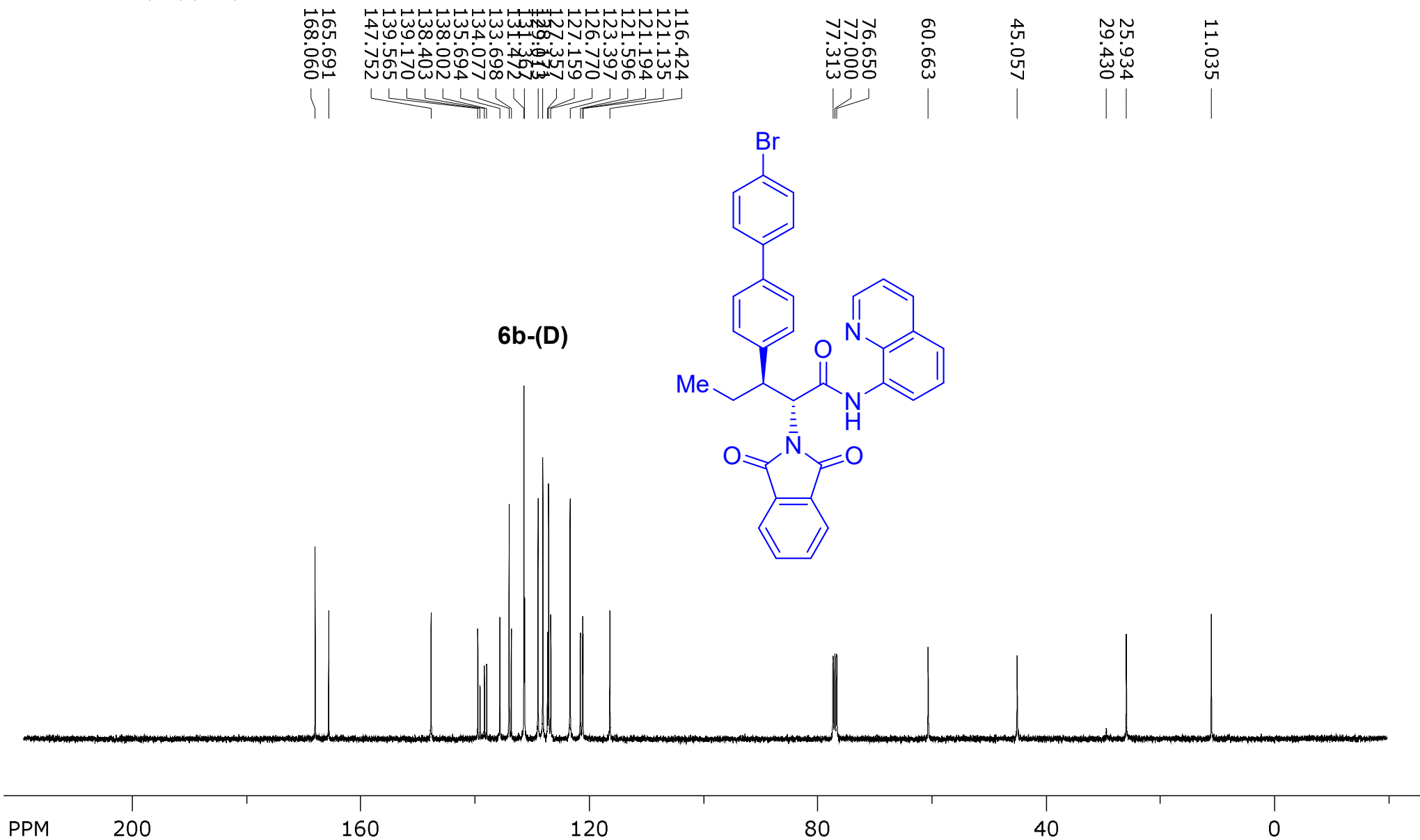












168.060 —

165.691 —

147.752 —

138.002 —
138.403 —
139.170 —
139.565 —

135.694 —
134.077 —
133.698 —

131.367 —
131.472 —

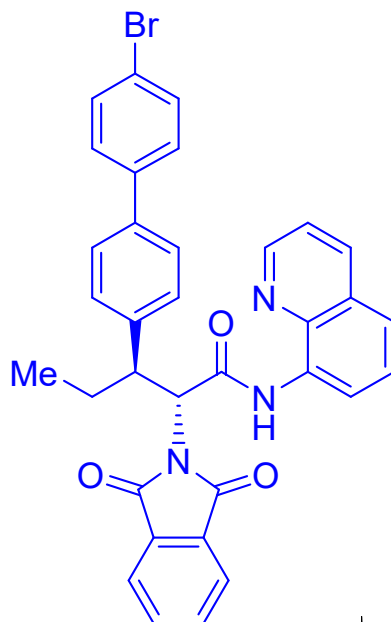
129.013 —
128.171 —
127.357 —
127.159 —
126.770 —

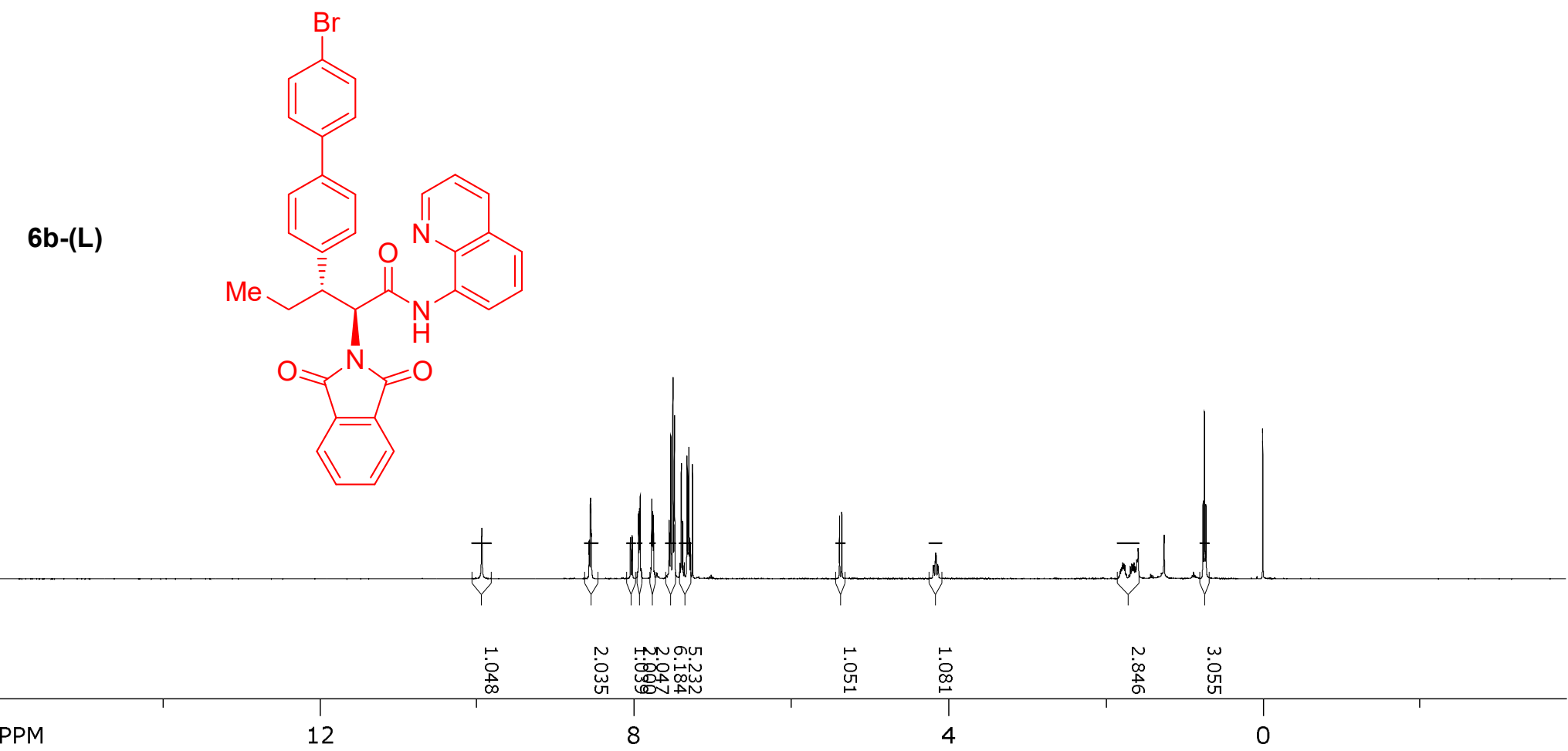
123.397 —

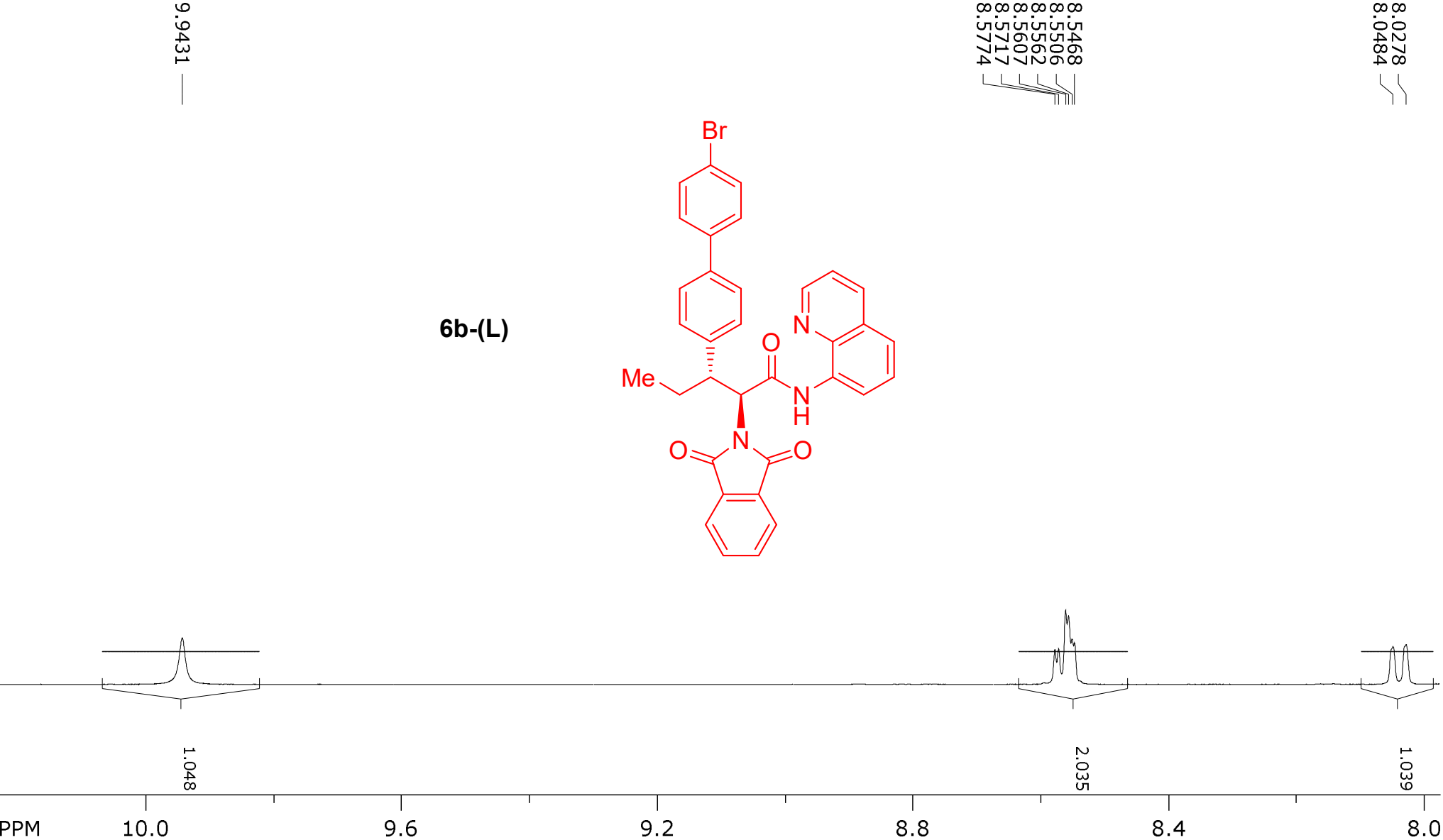
121.596 —
121.194 —
121.135 —

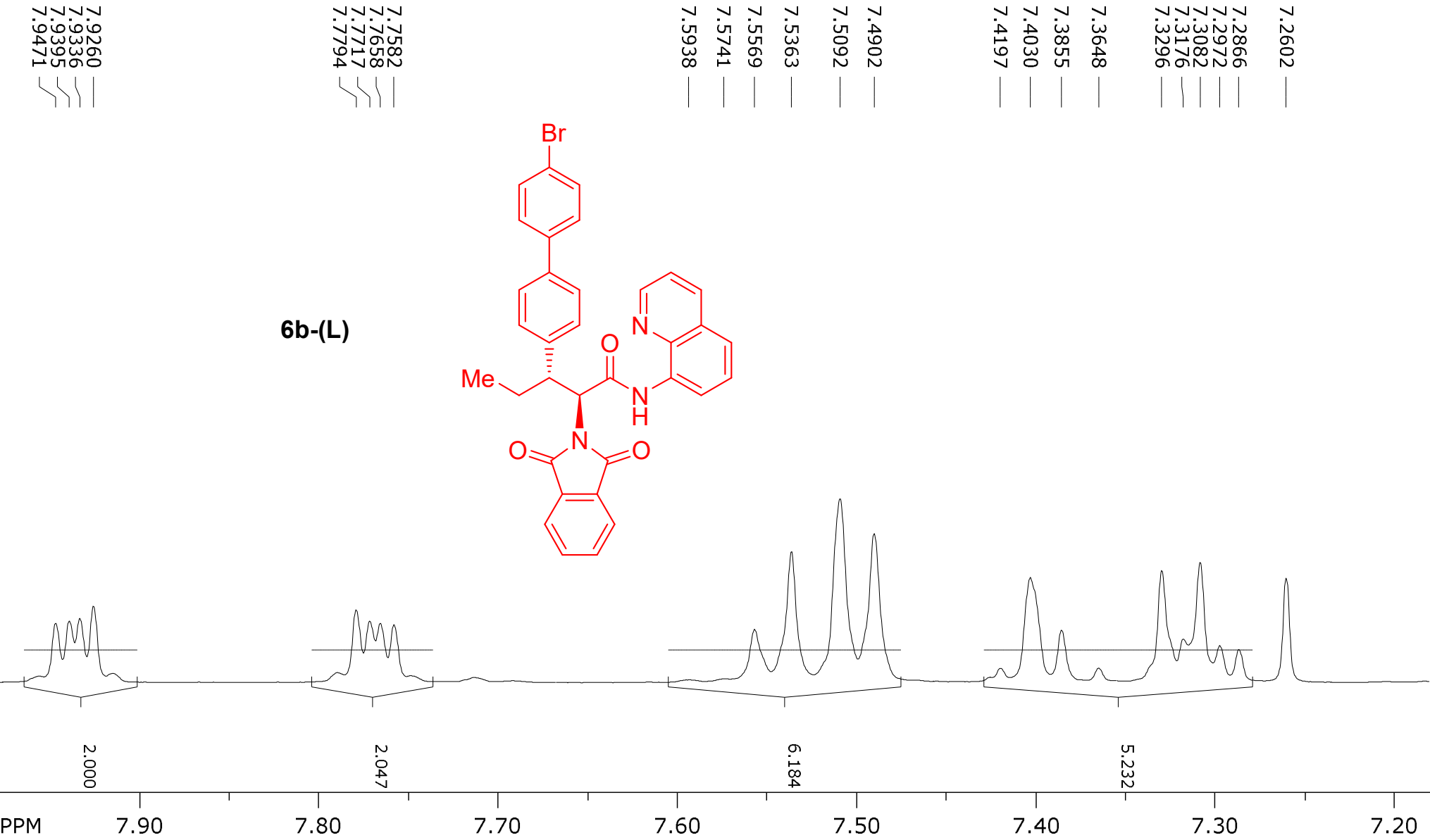
116.424 —

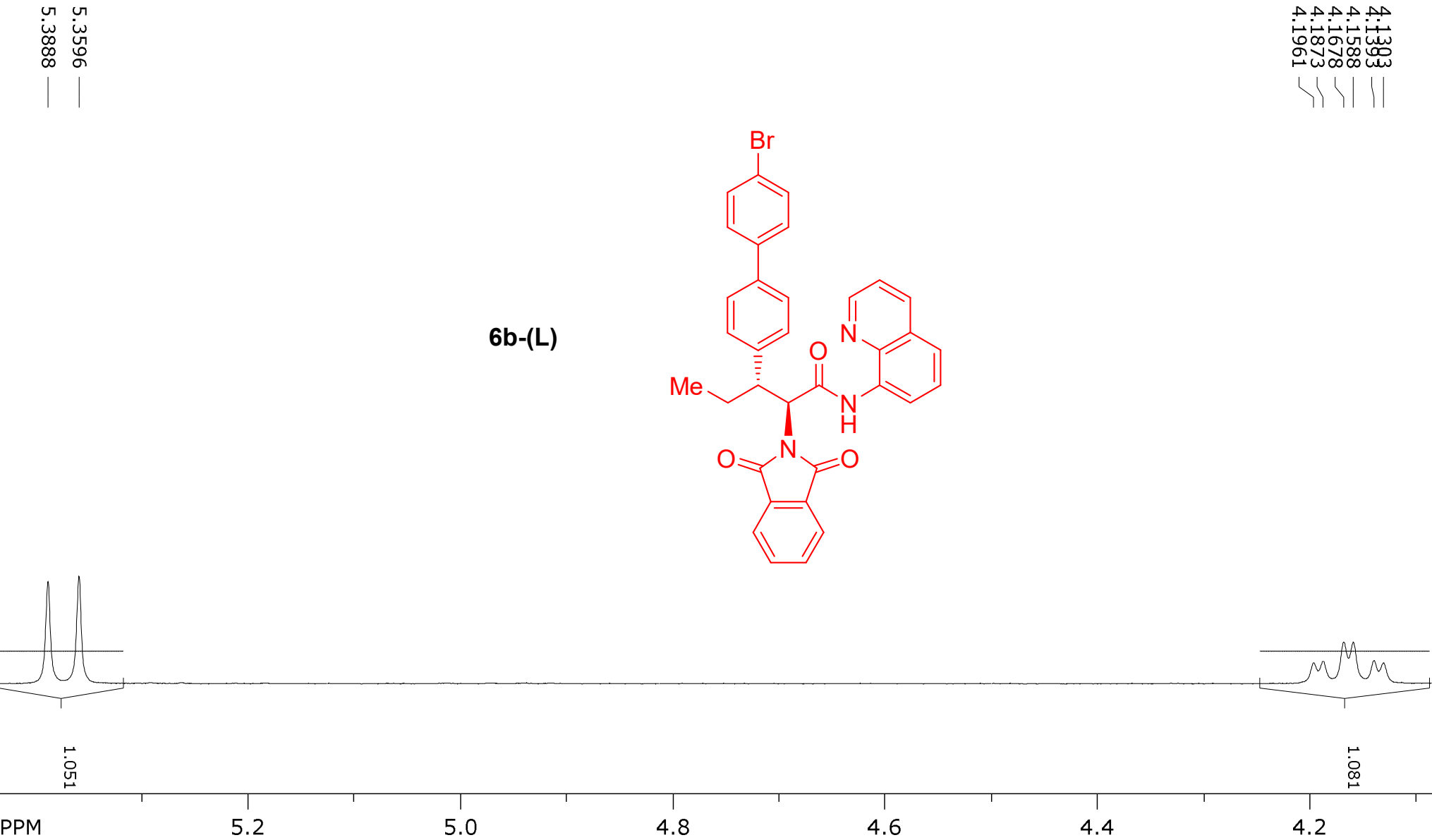
6b-(D)

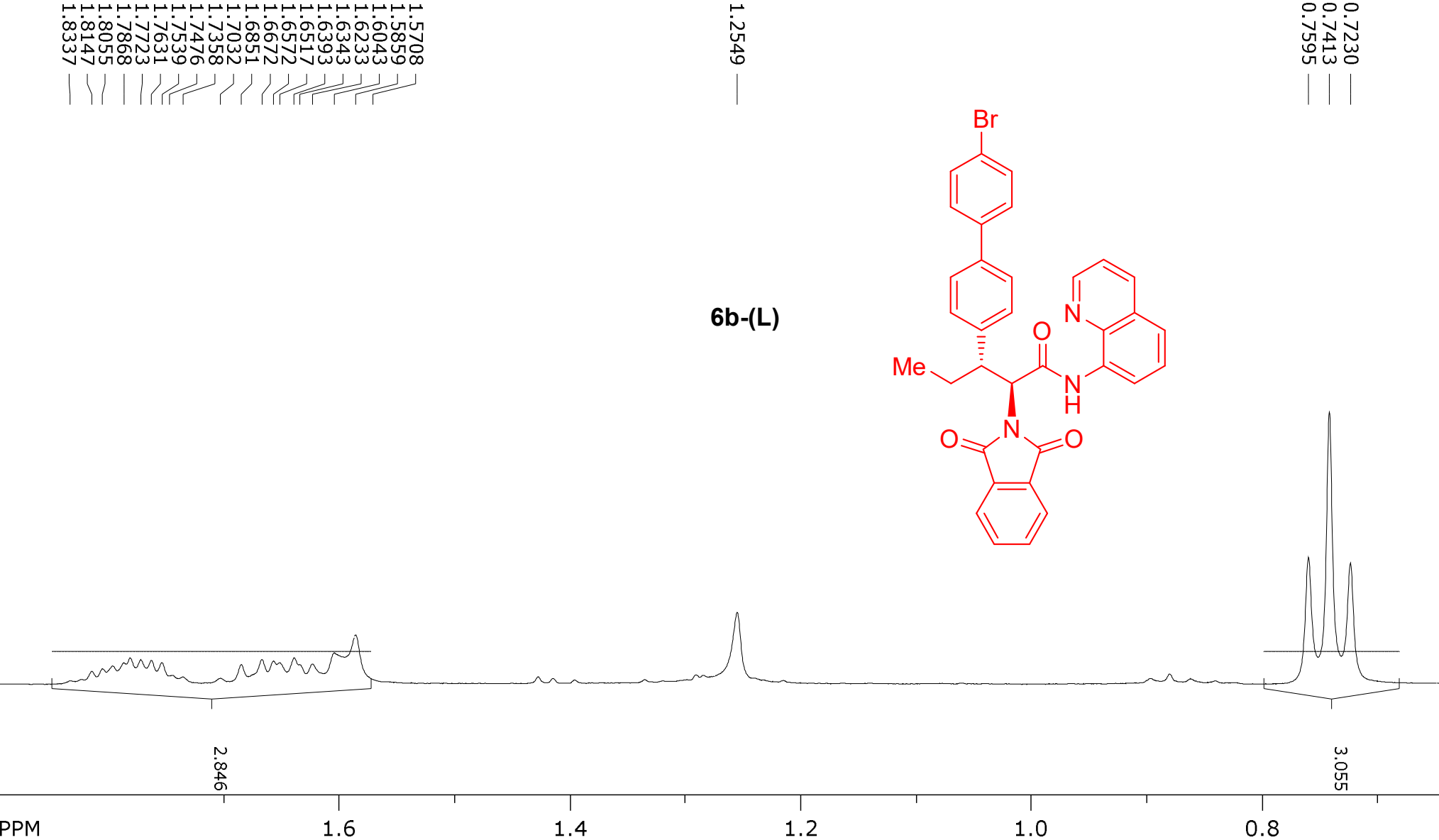


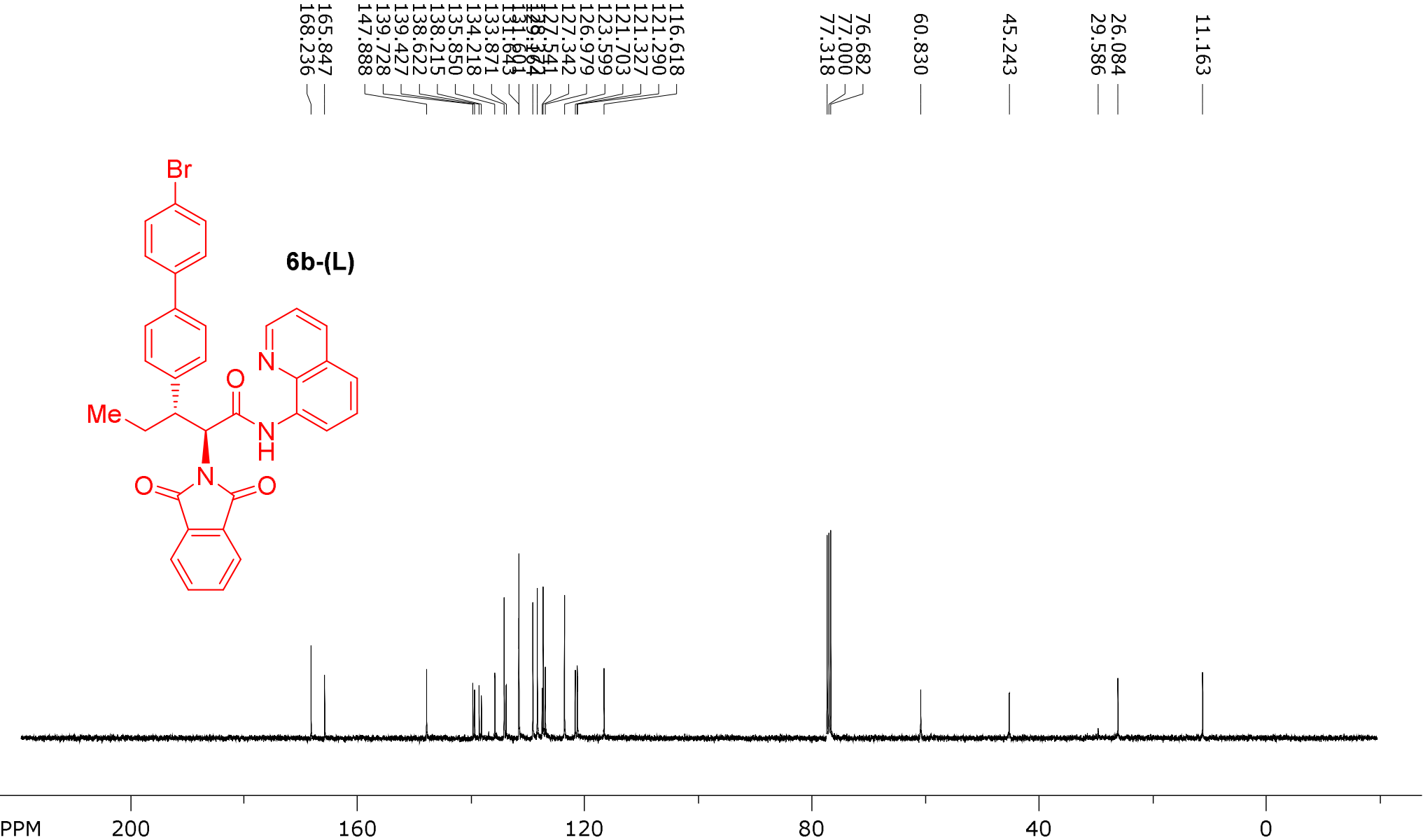


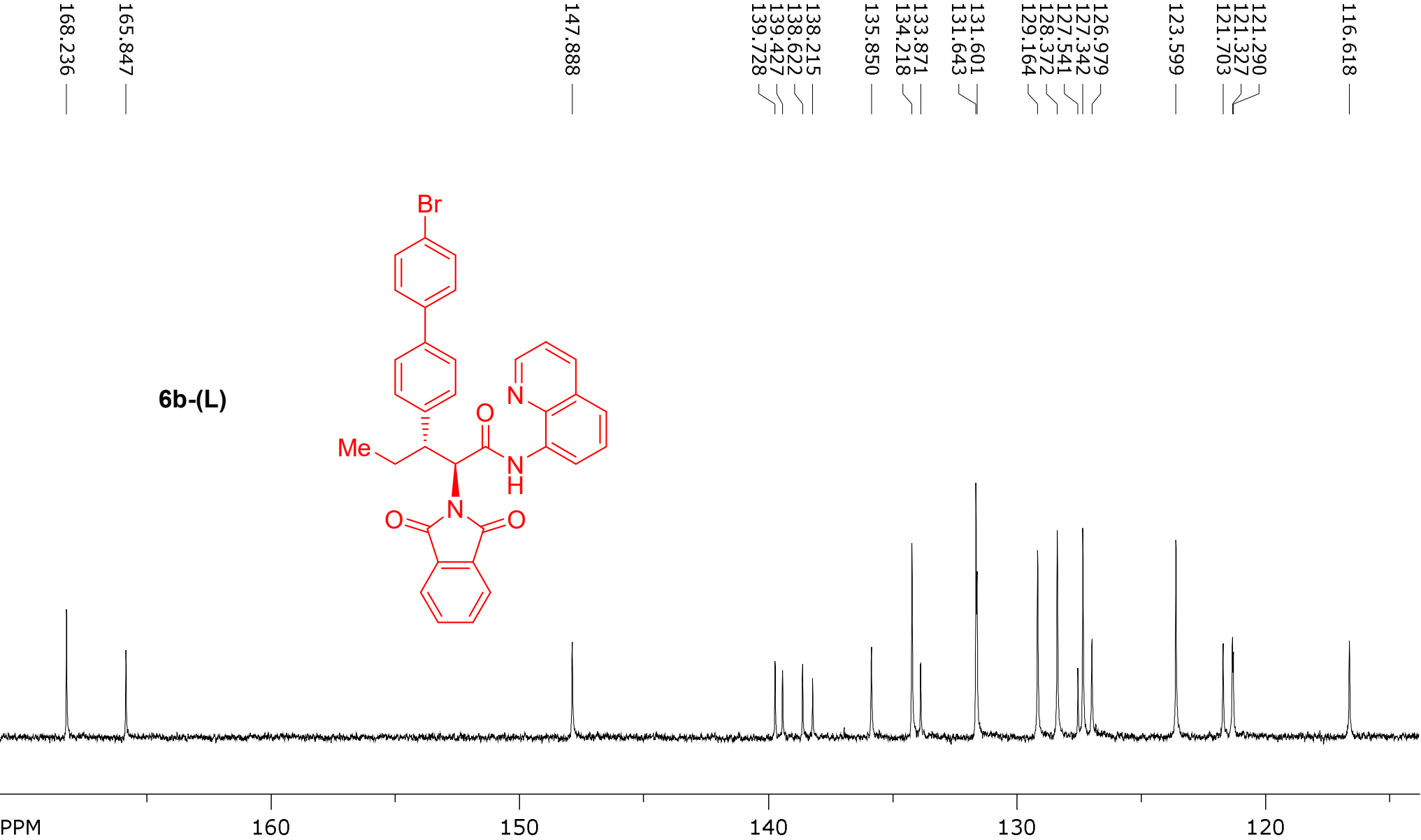


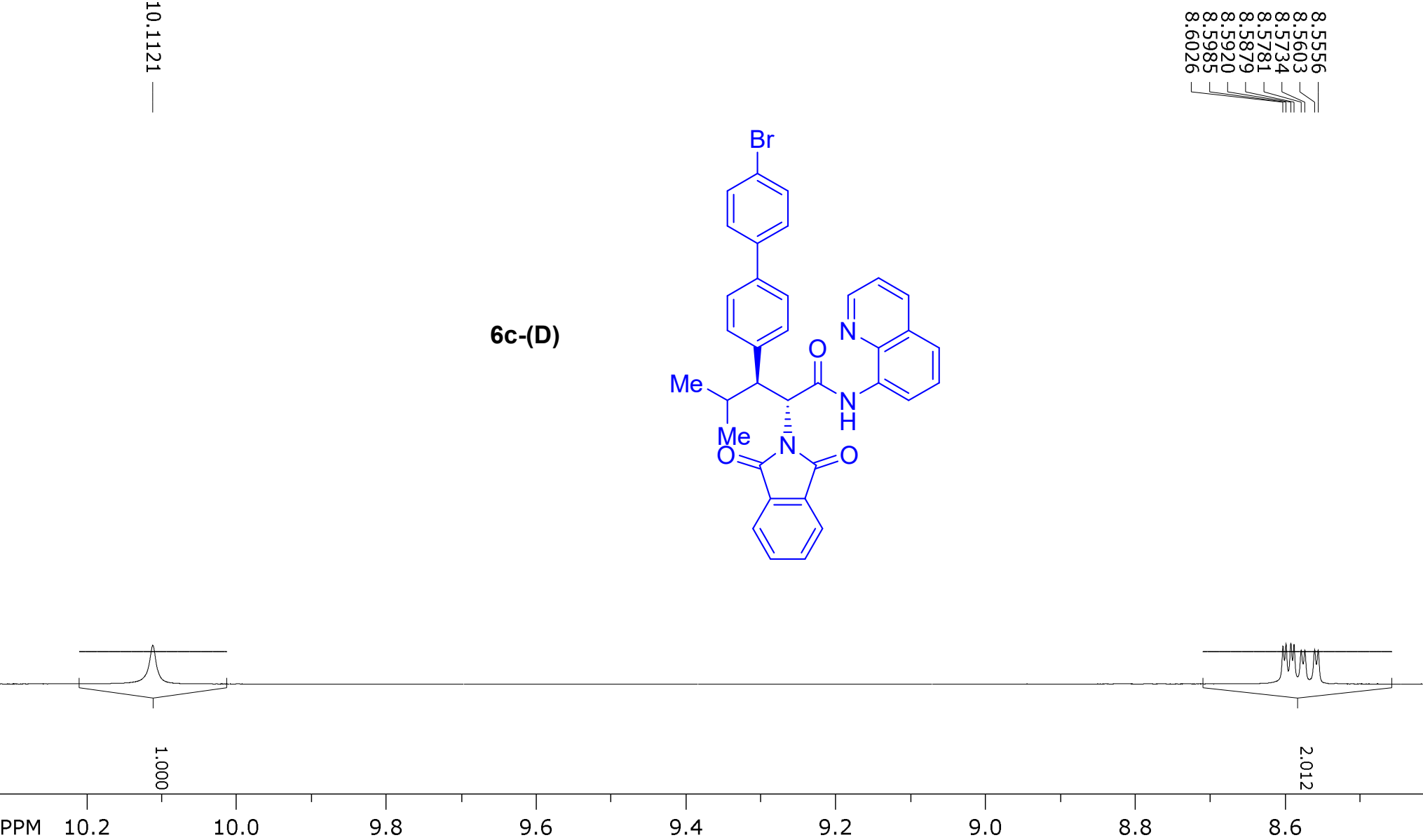


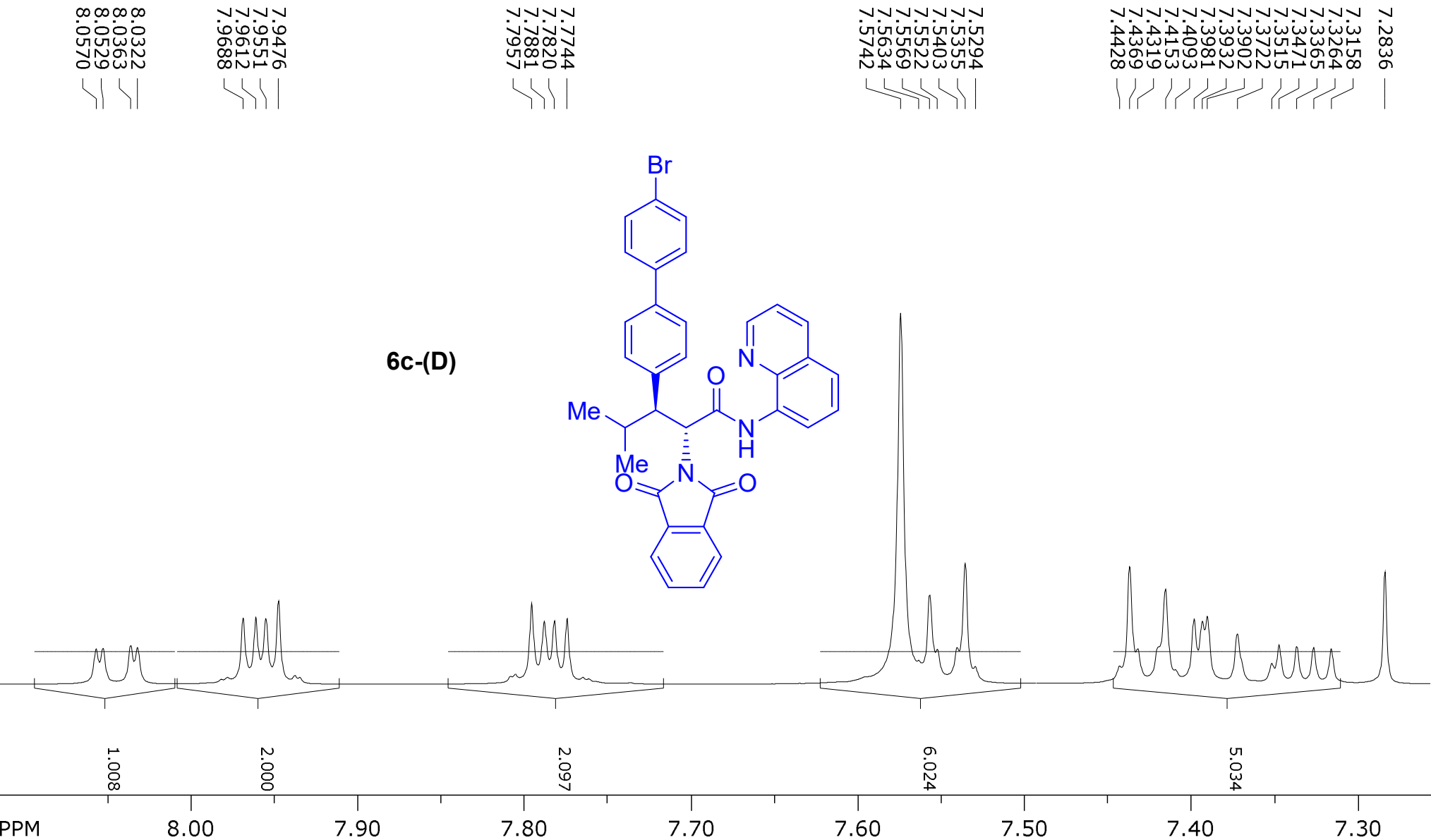


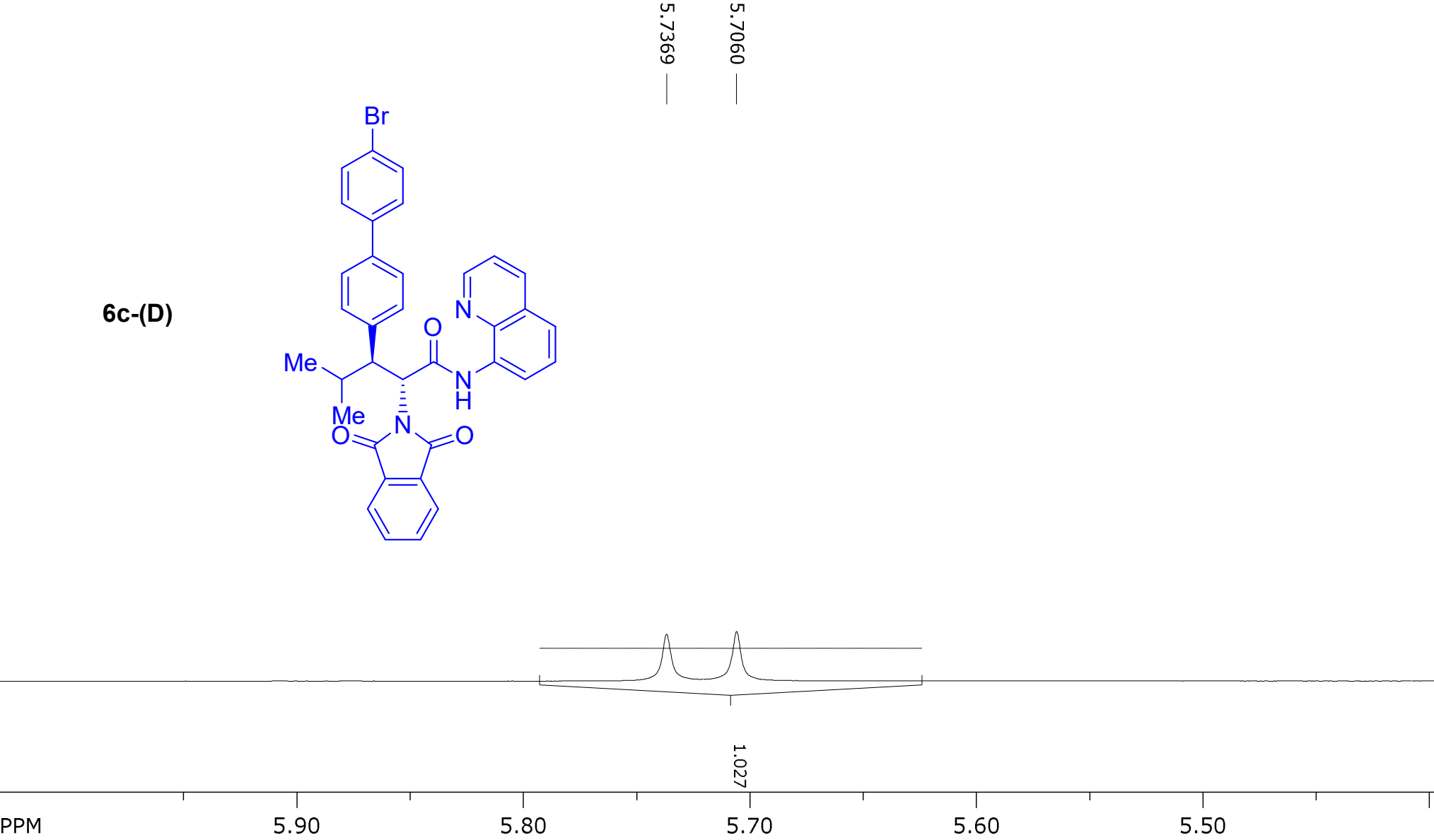






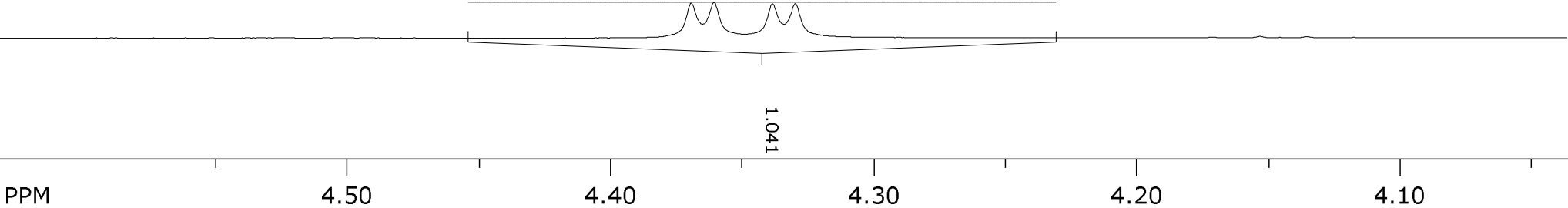
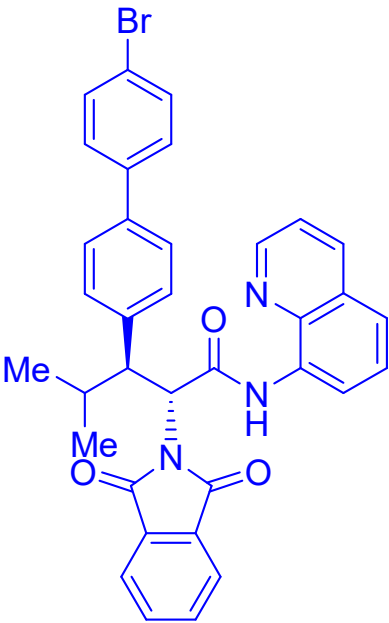


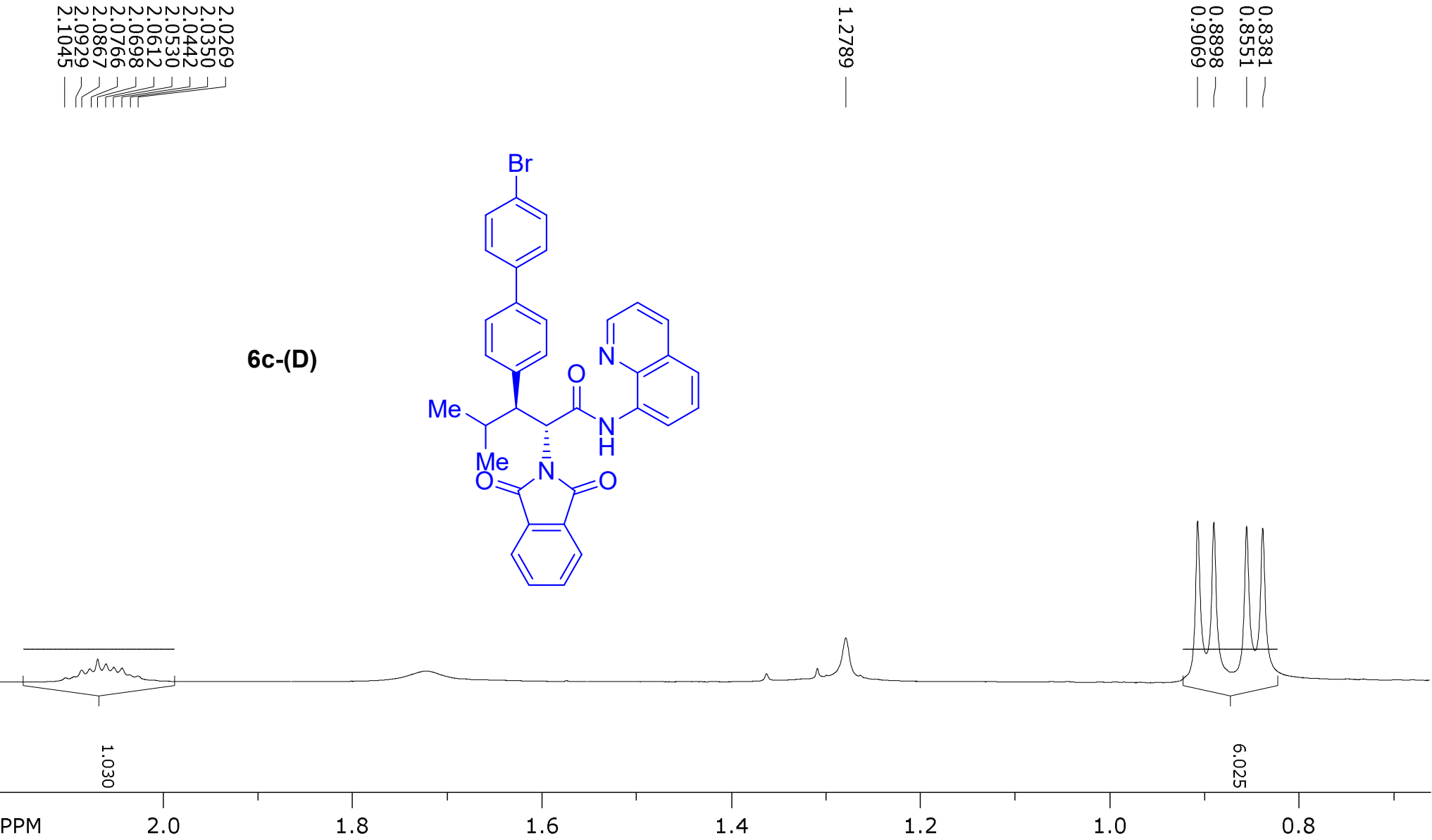


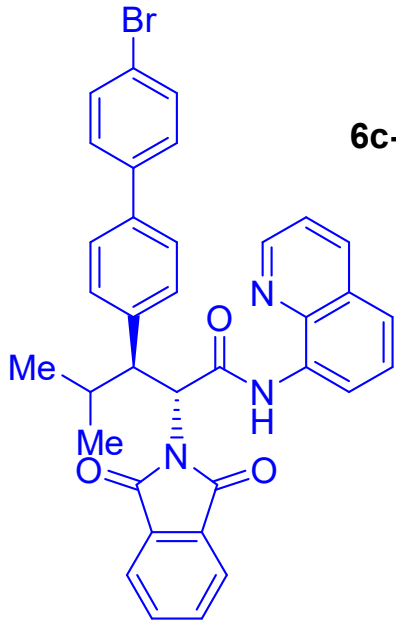


4.3299 —
4.3385 —
4.3608 —
4.3694 —

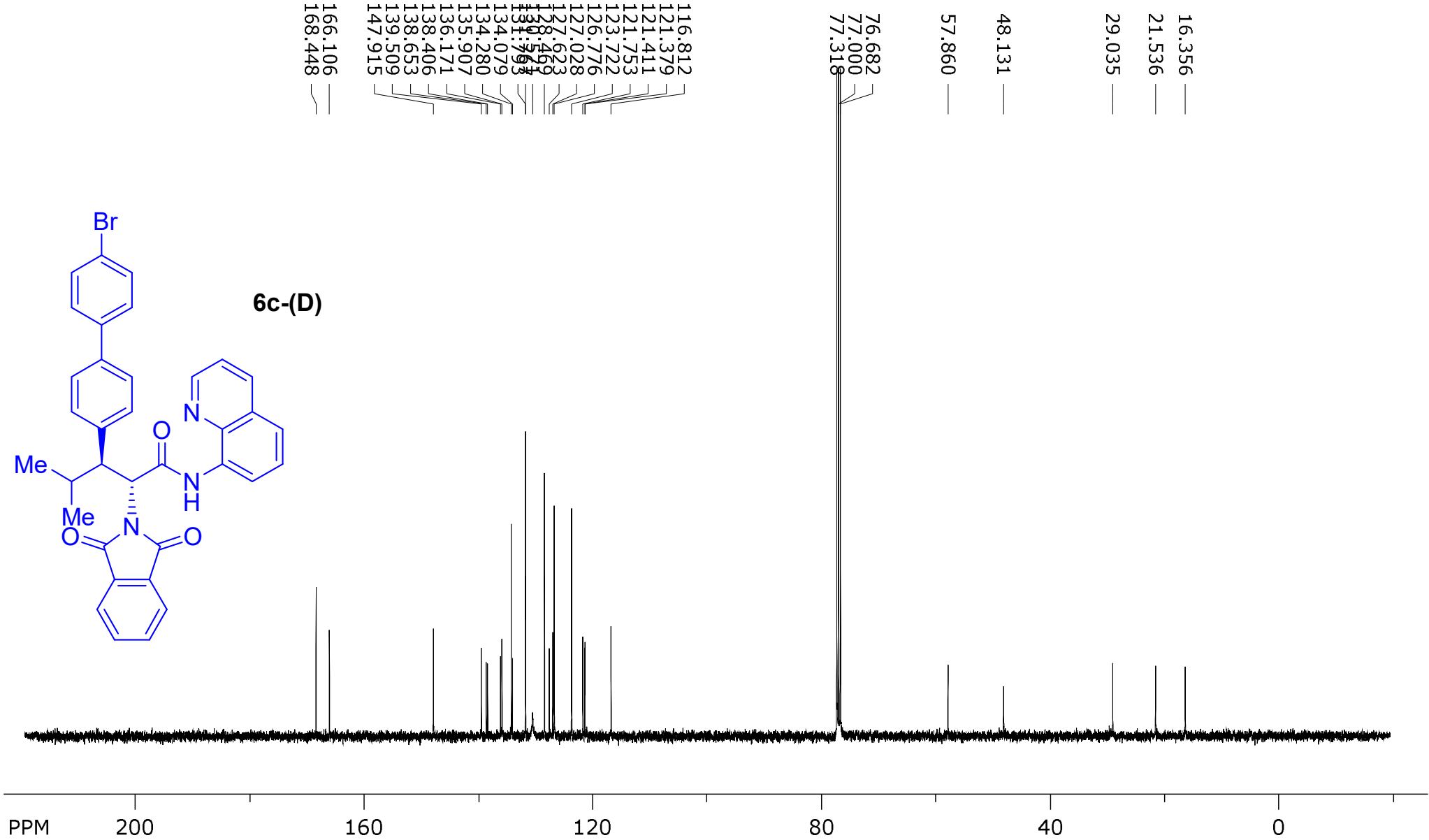
6c-(D)





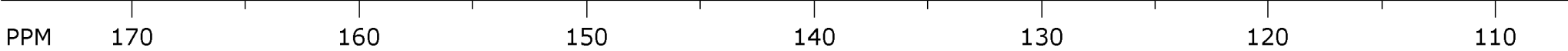
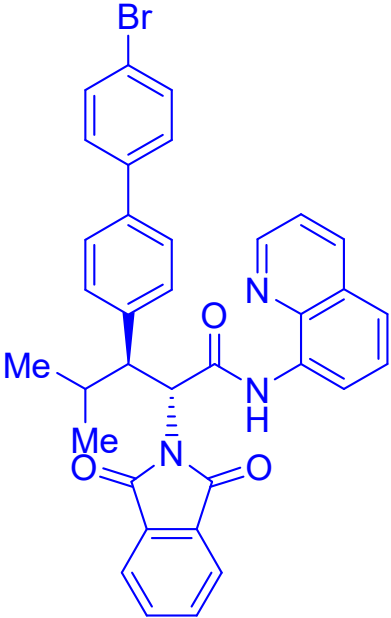


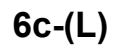
6c-(D)

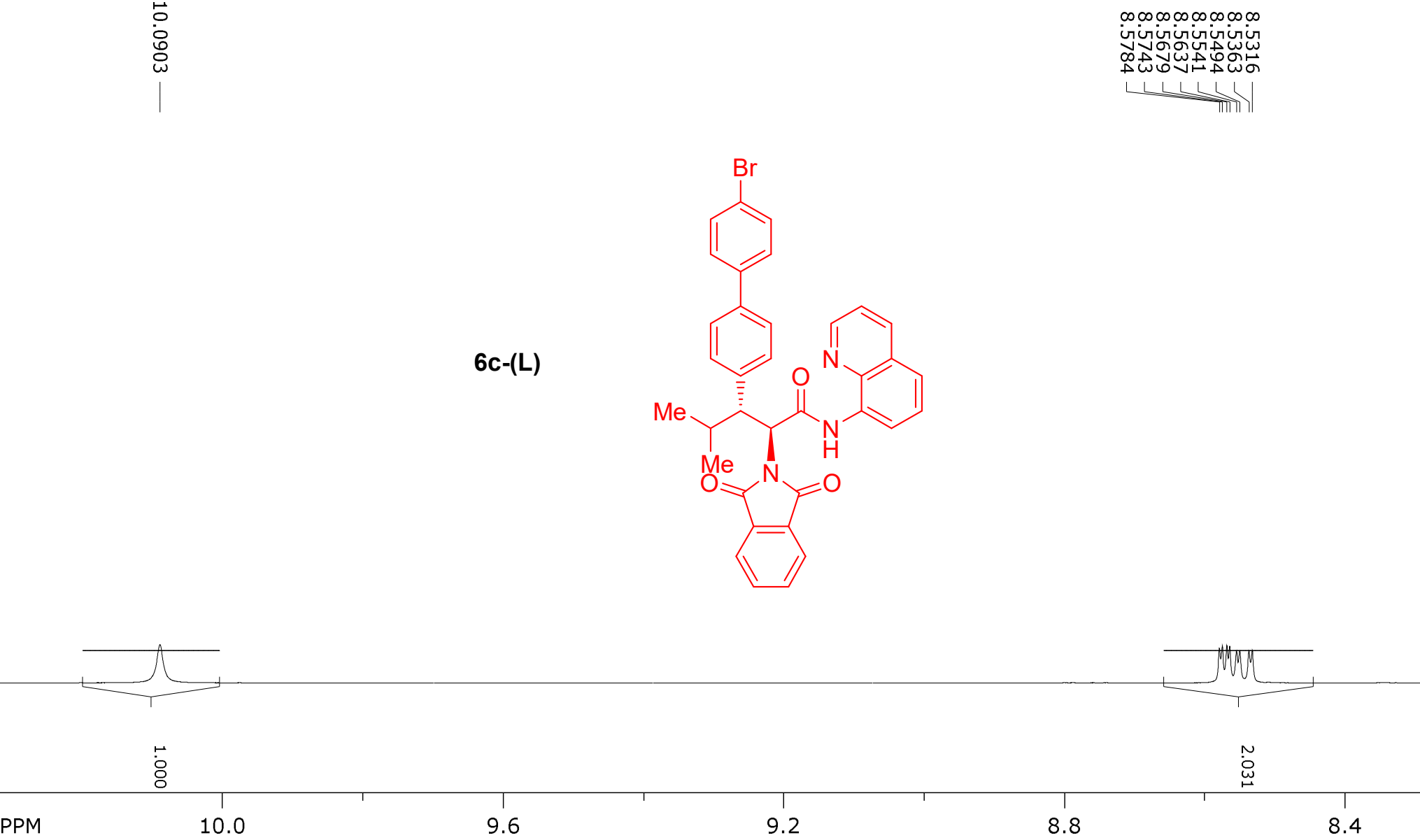


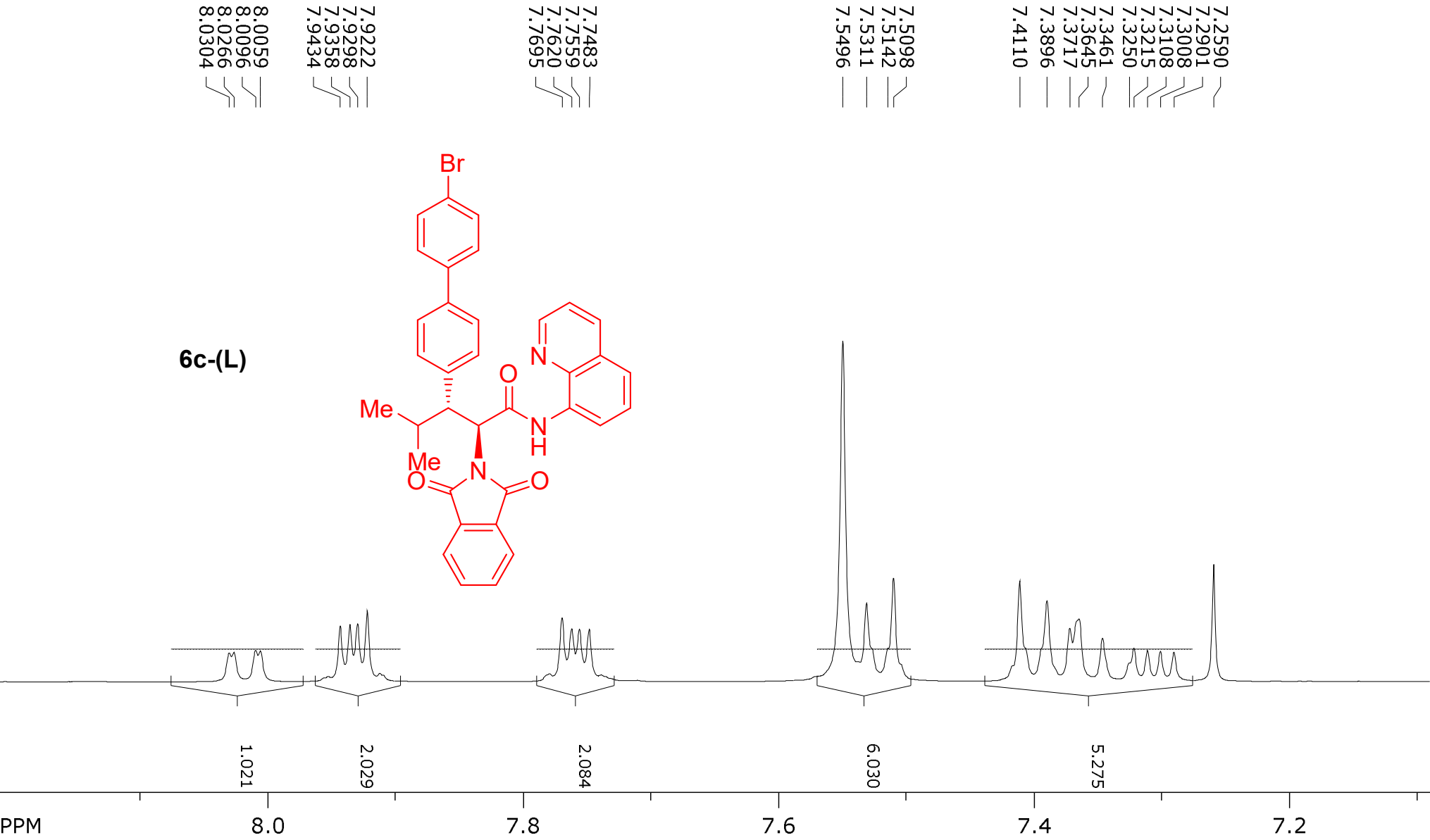
168.448	166.106	147.915	139.509	138.406	138.653	136.171	135.907	134.280	134.079	131.793	131.767	130.571	128.469	127.623	127.028	126.776	123.722	121.753	121.411	121.379	116.812
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

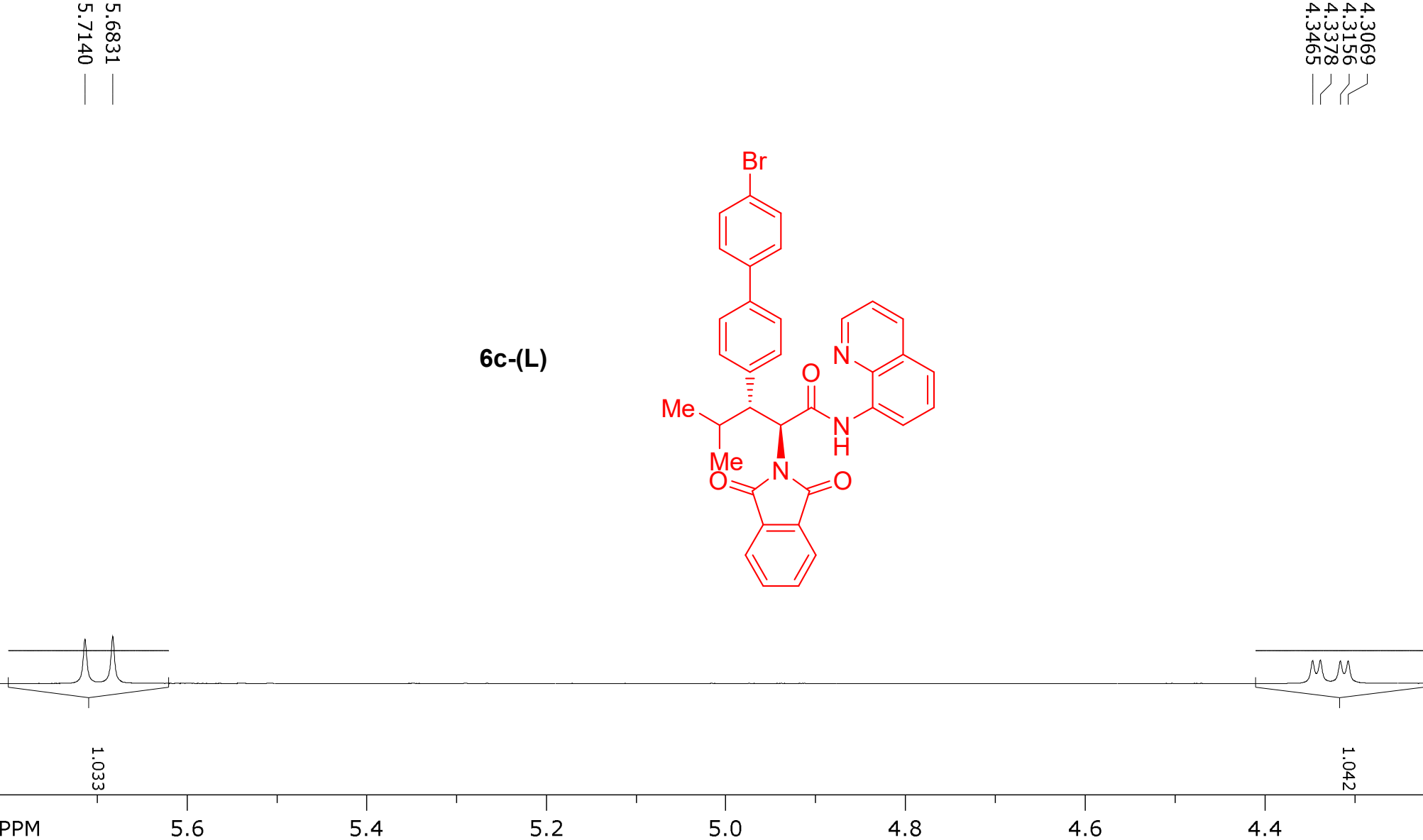
6c-(D)

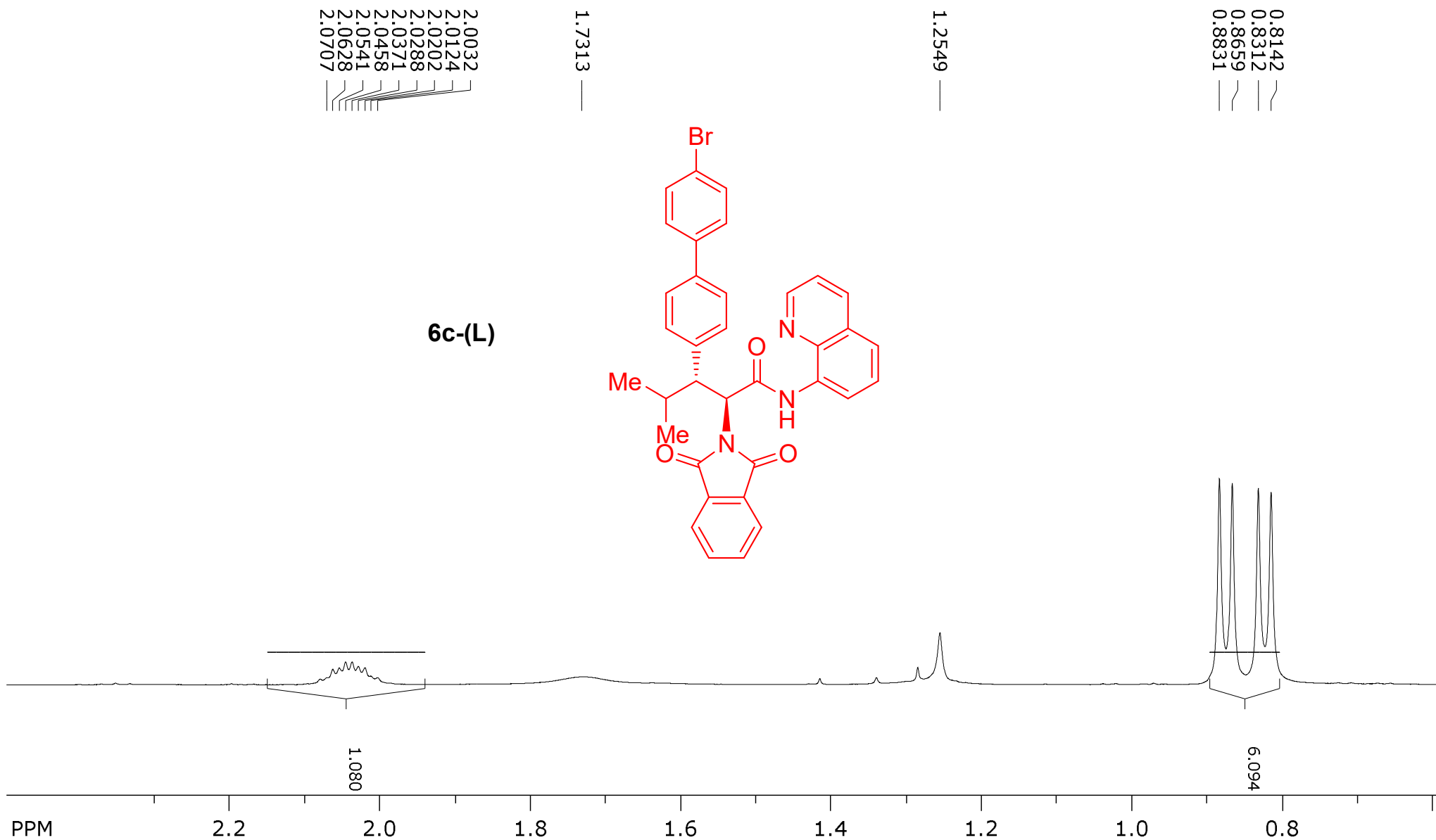


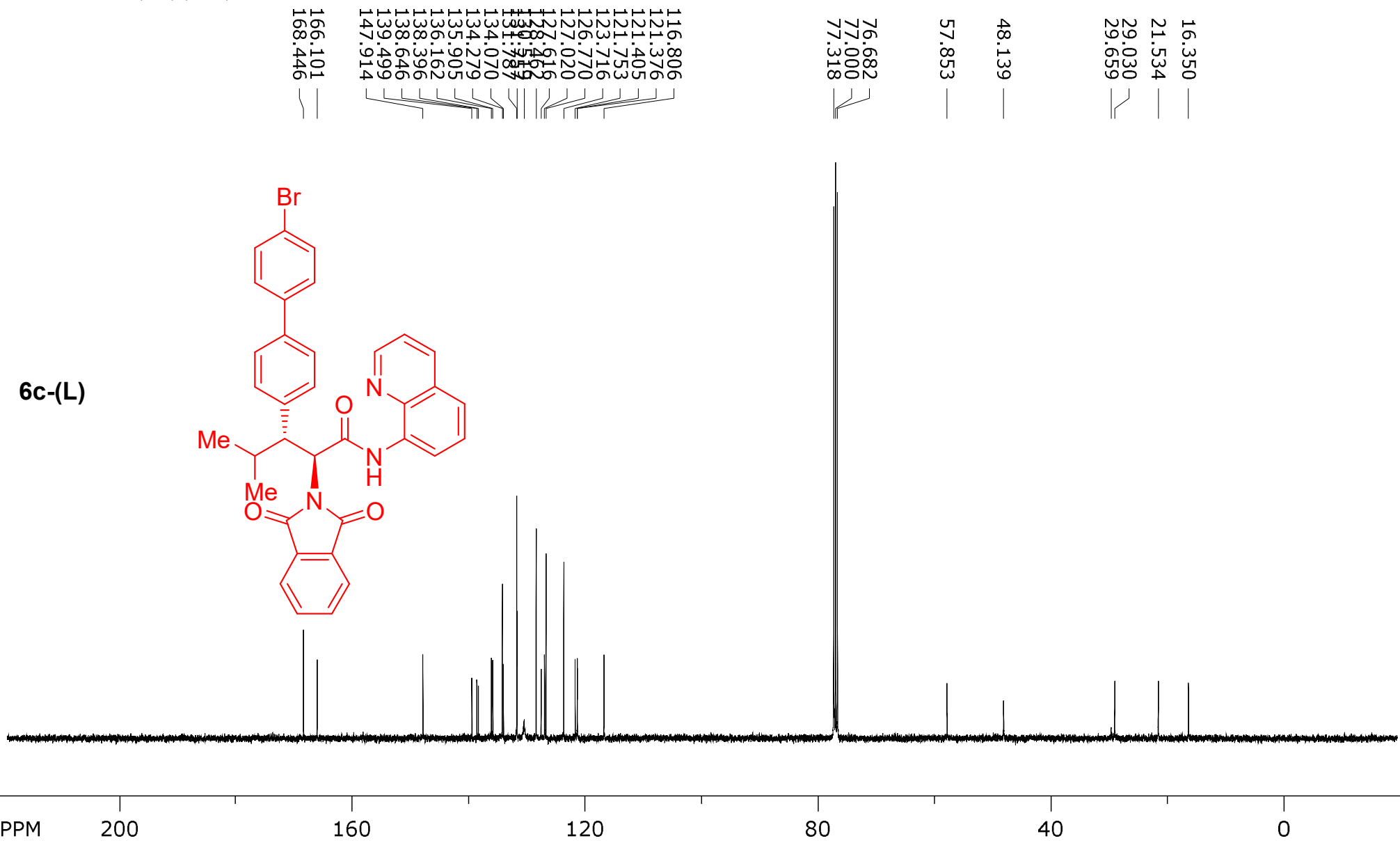


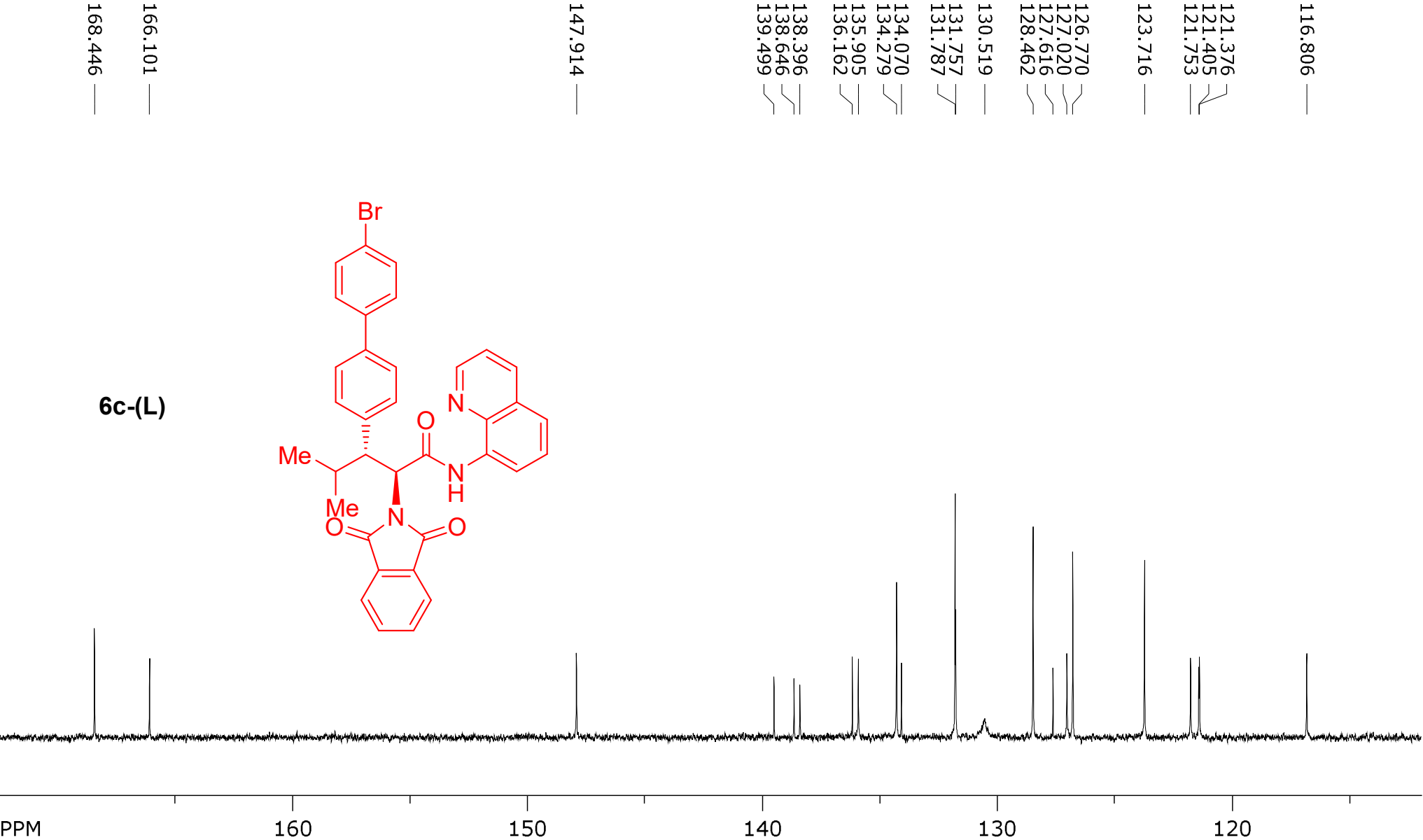


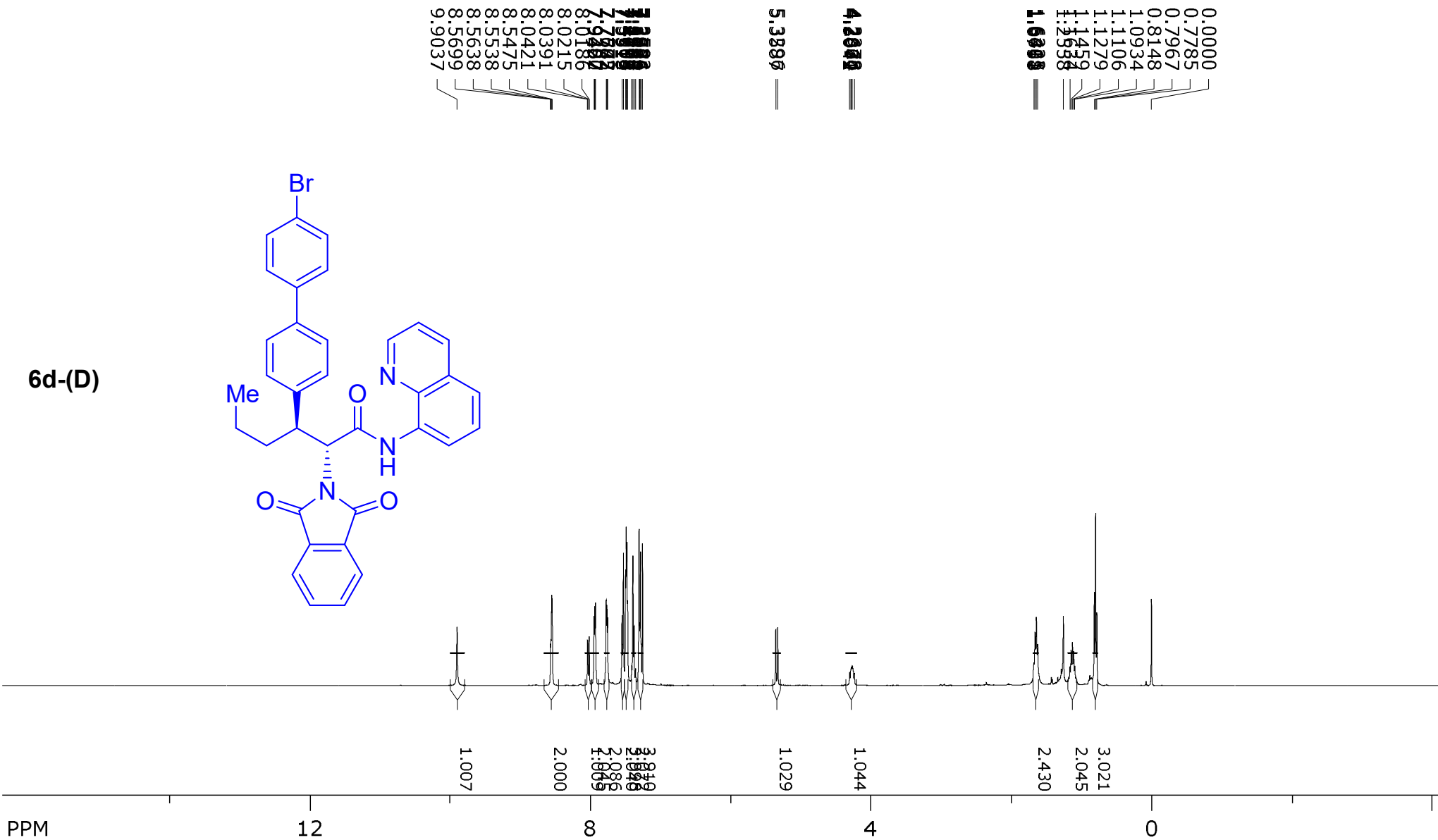


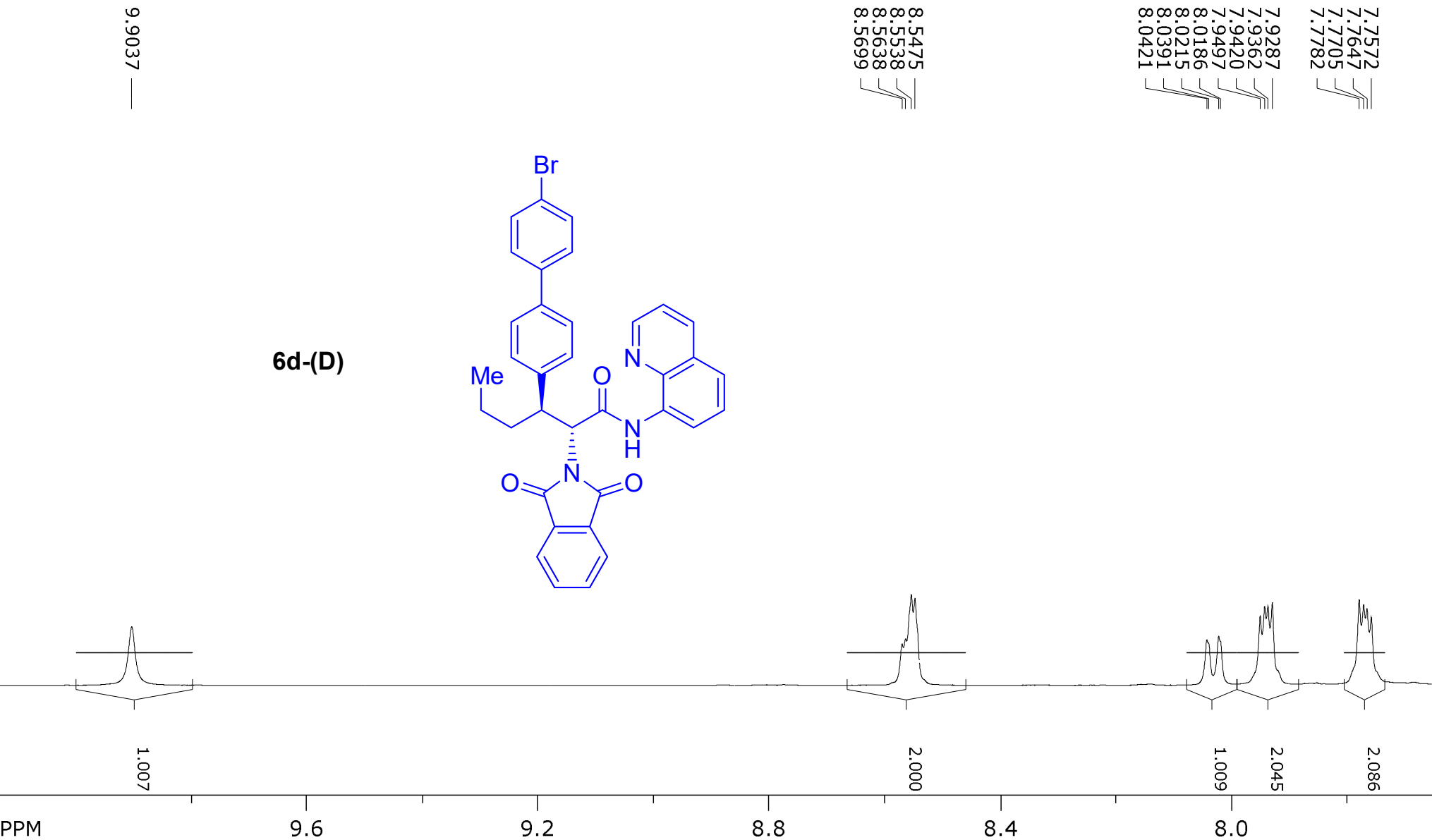


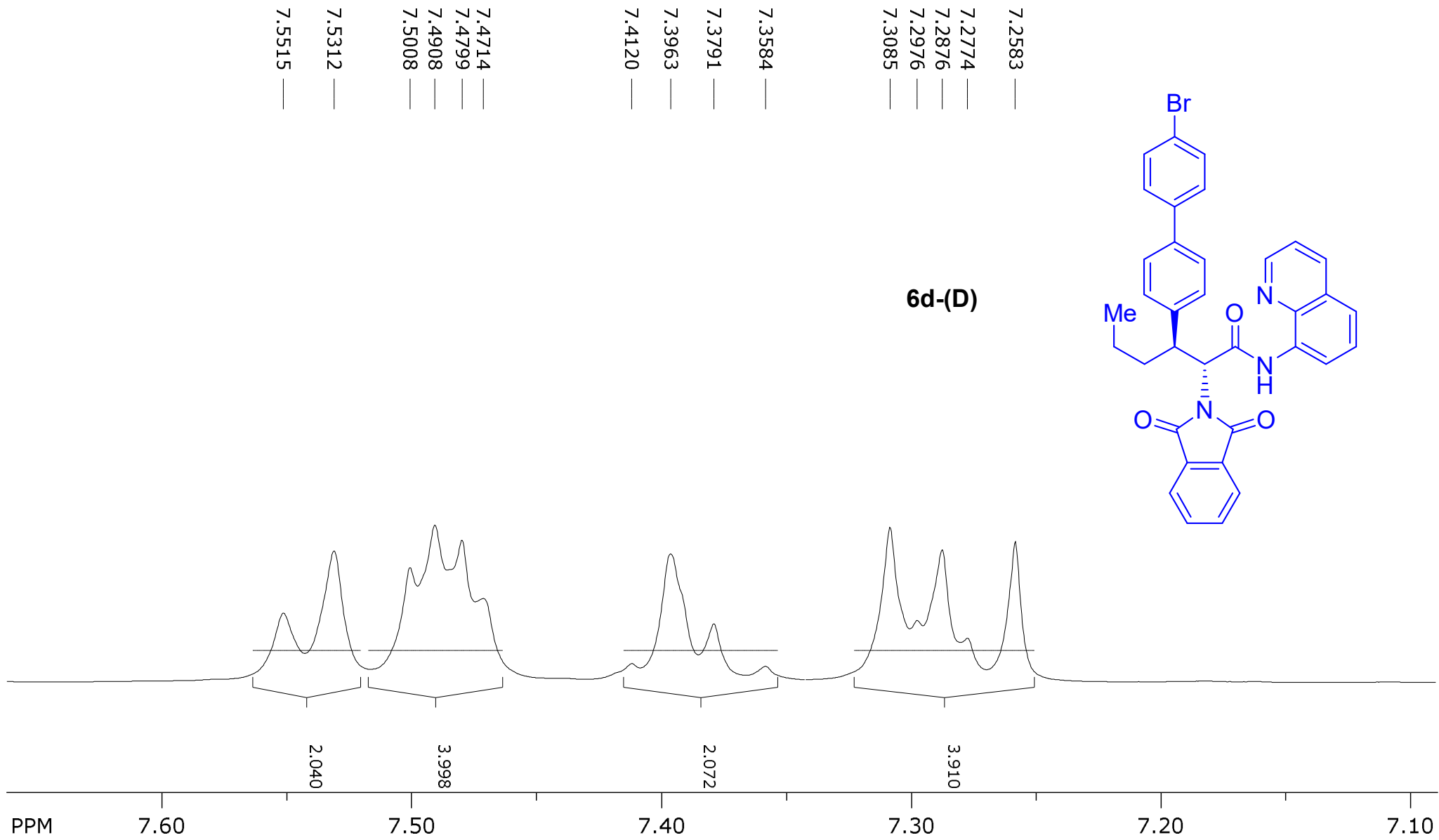








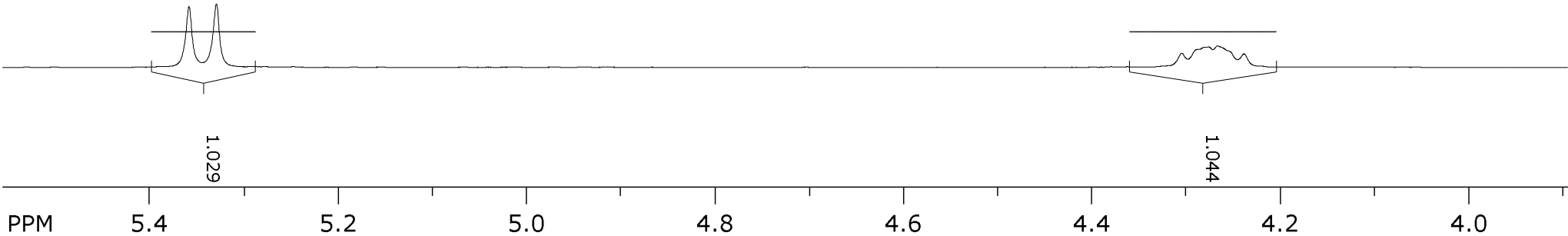
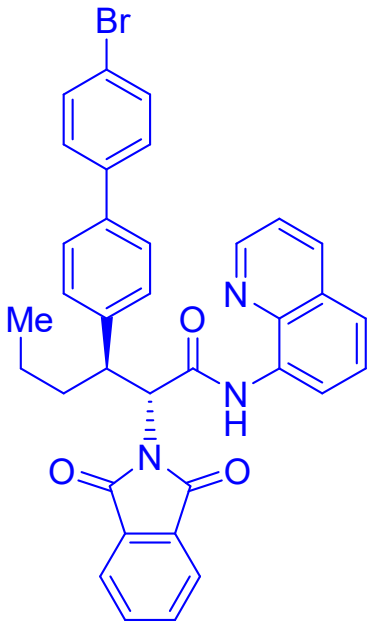


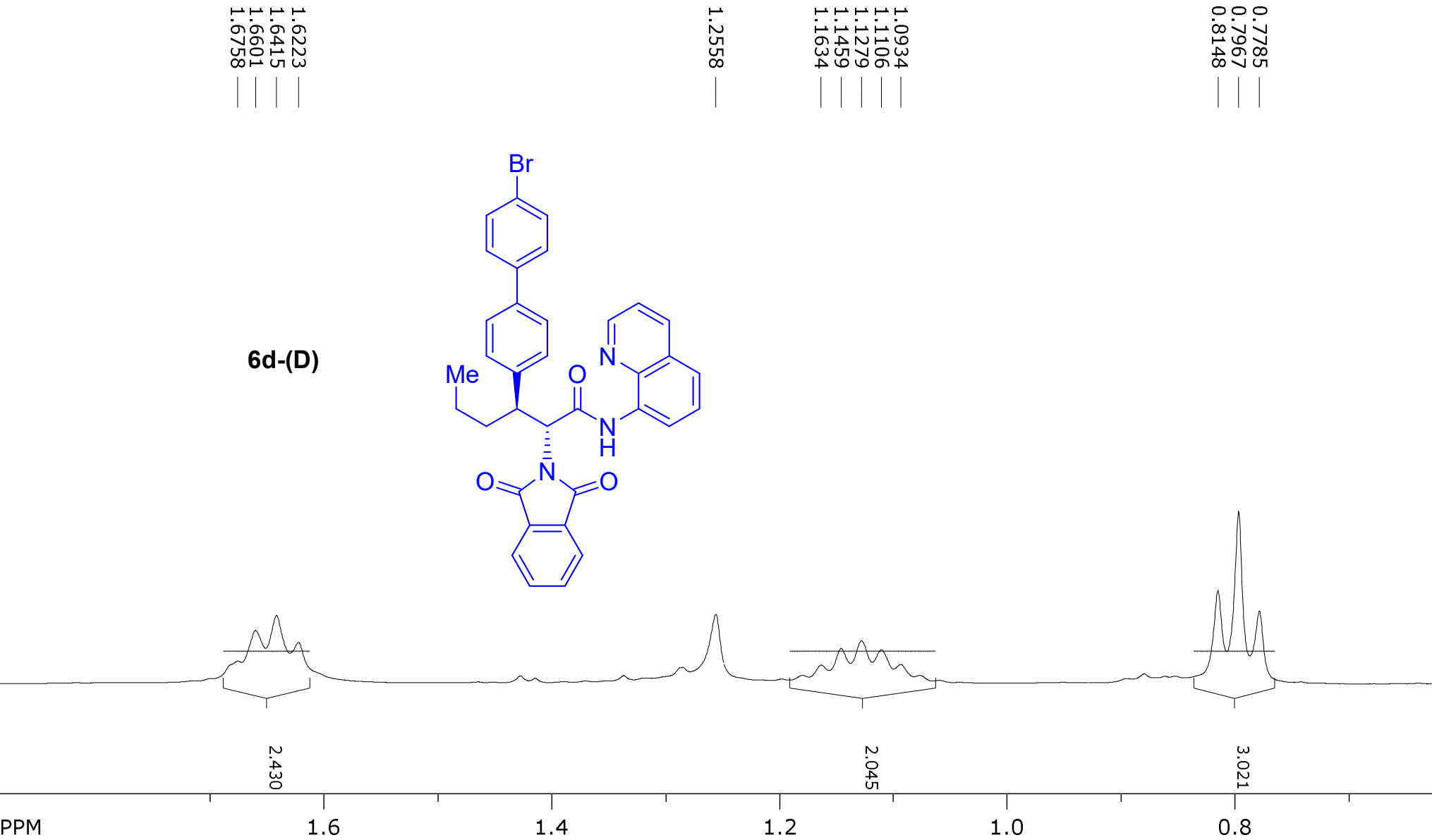


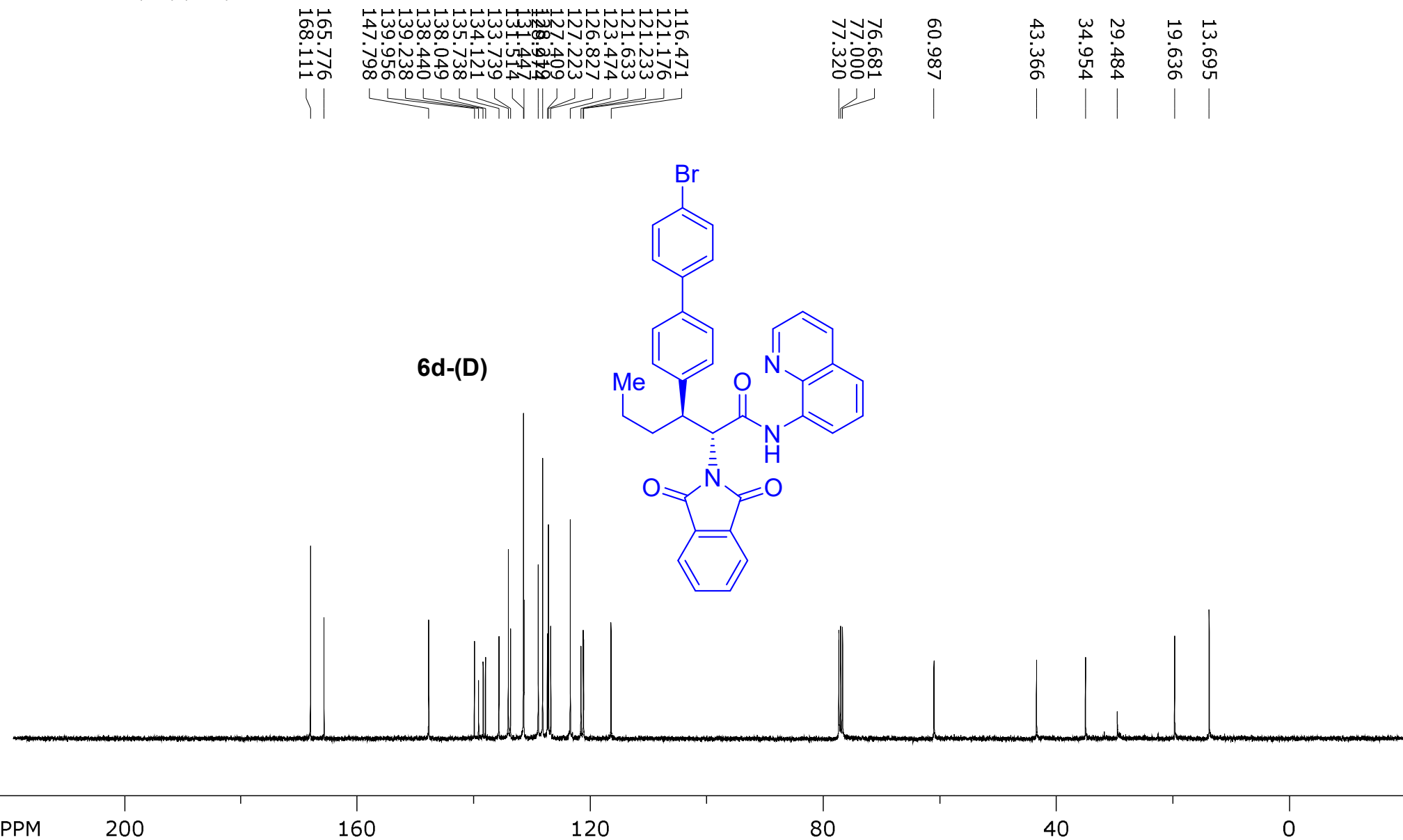
5.3296
5.3587

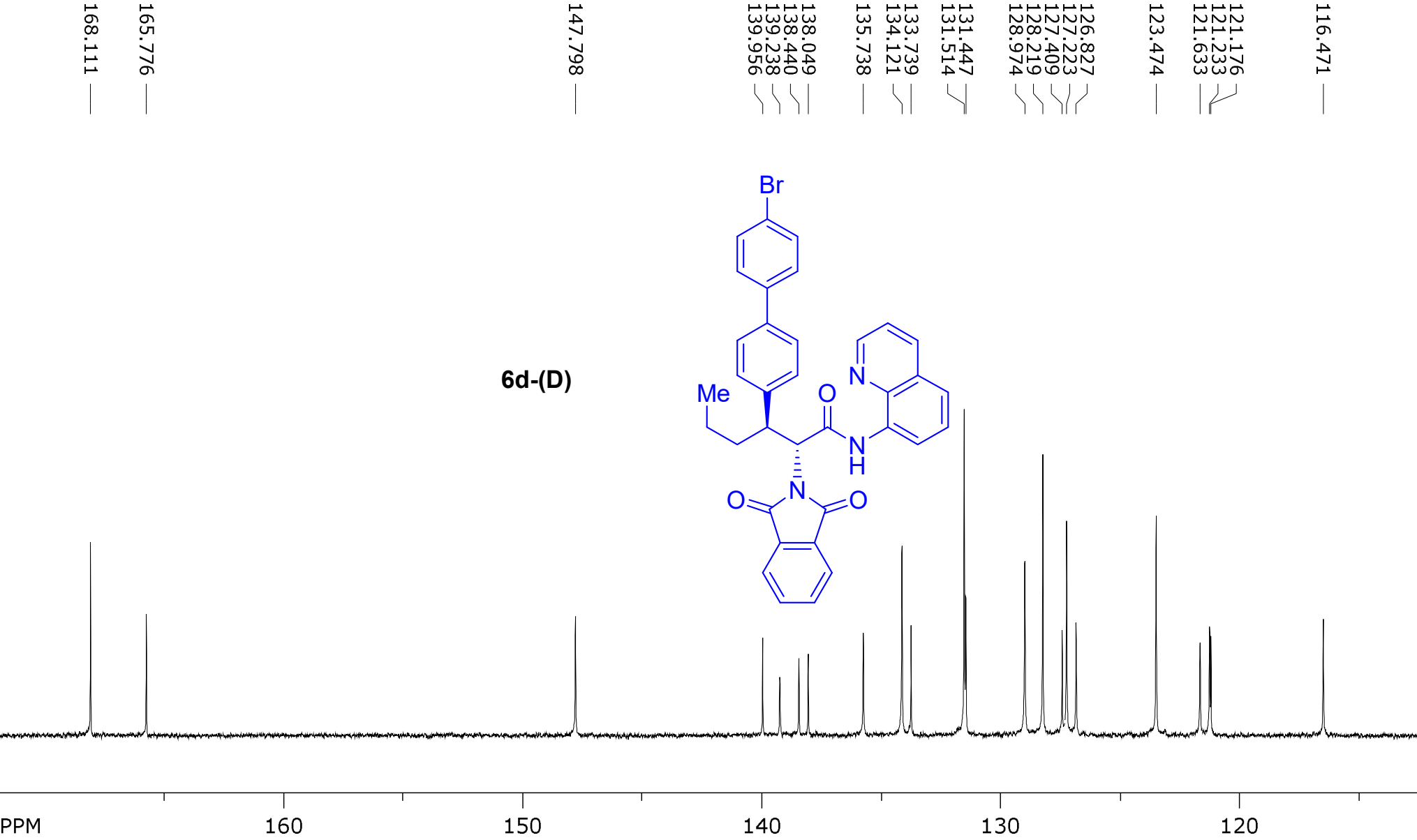
4.2378
4.2660
4.2804
4.2871
4.3042

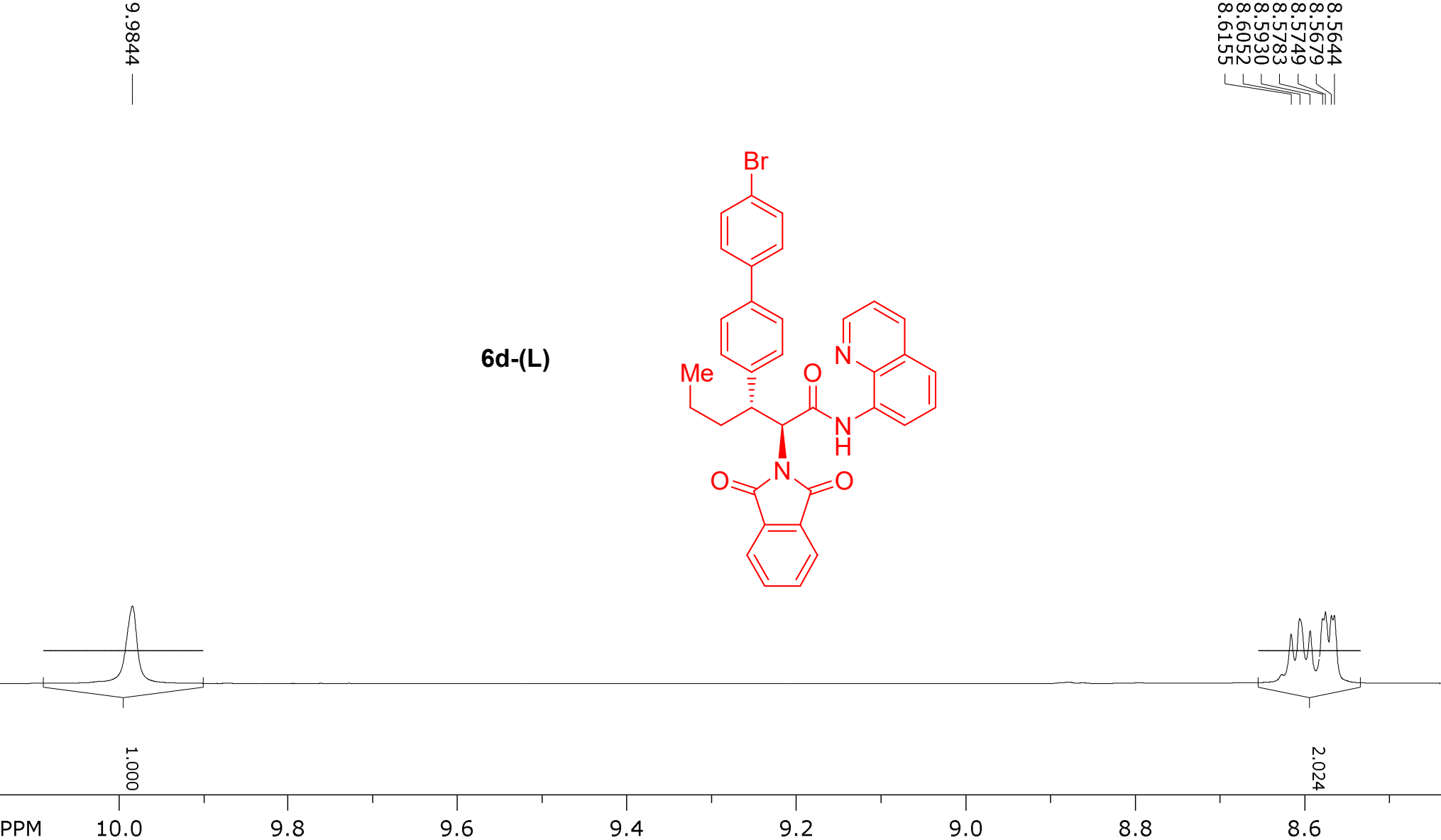
6d-(D)



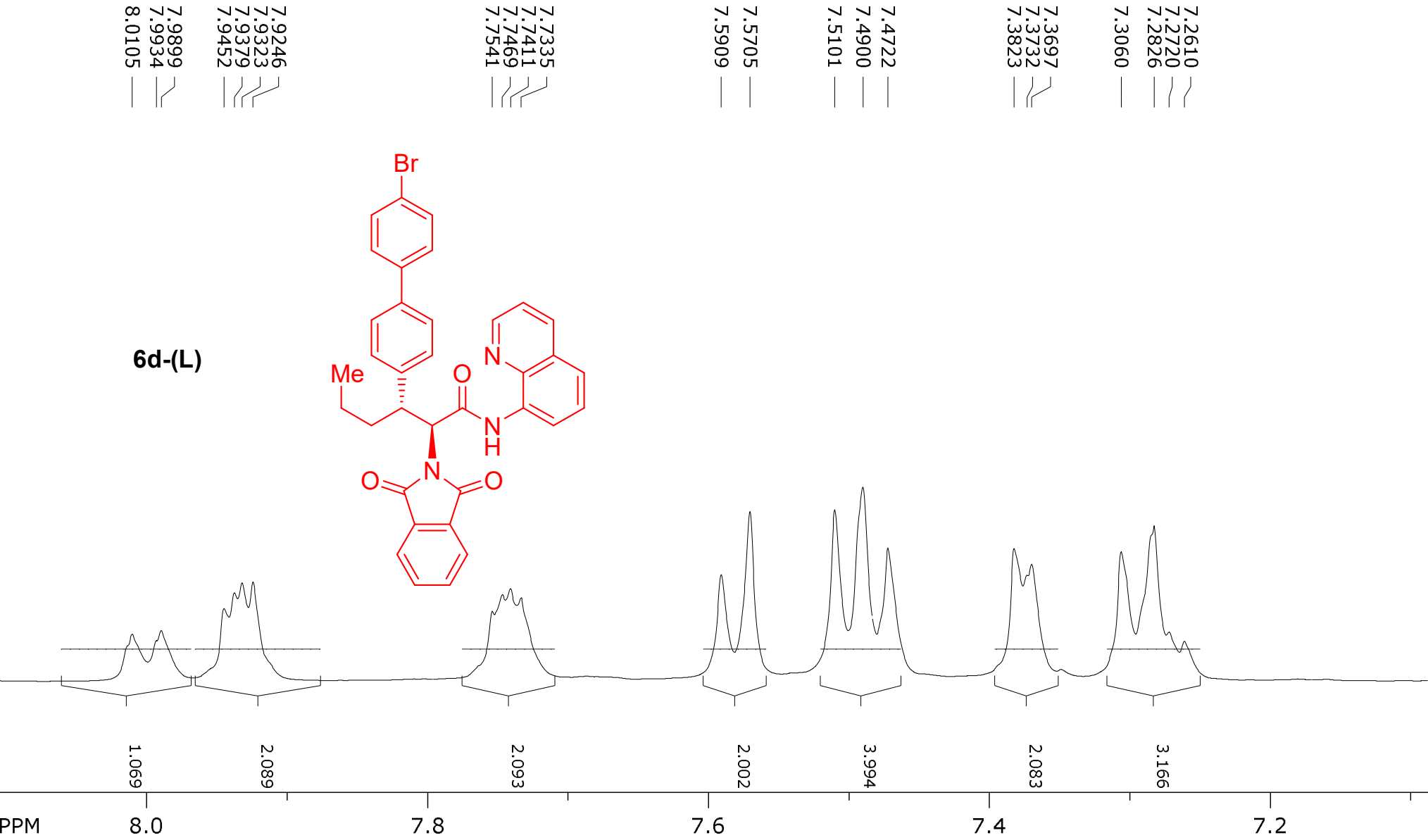








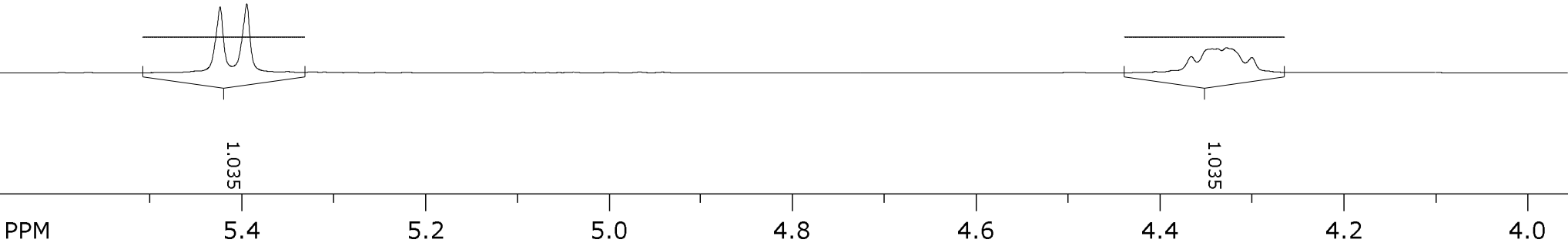
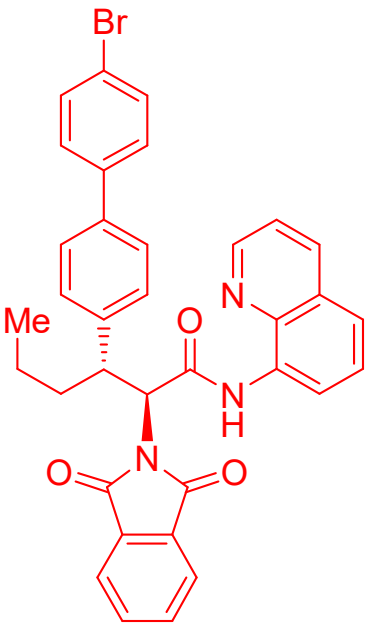
8.5644
8.5679
8.5749
8.5783
8.5930
8.6052
8.6155



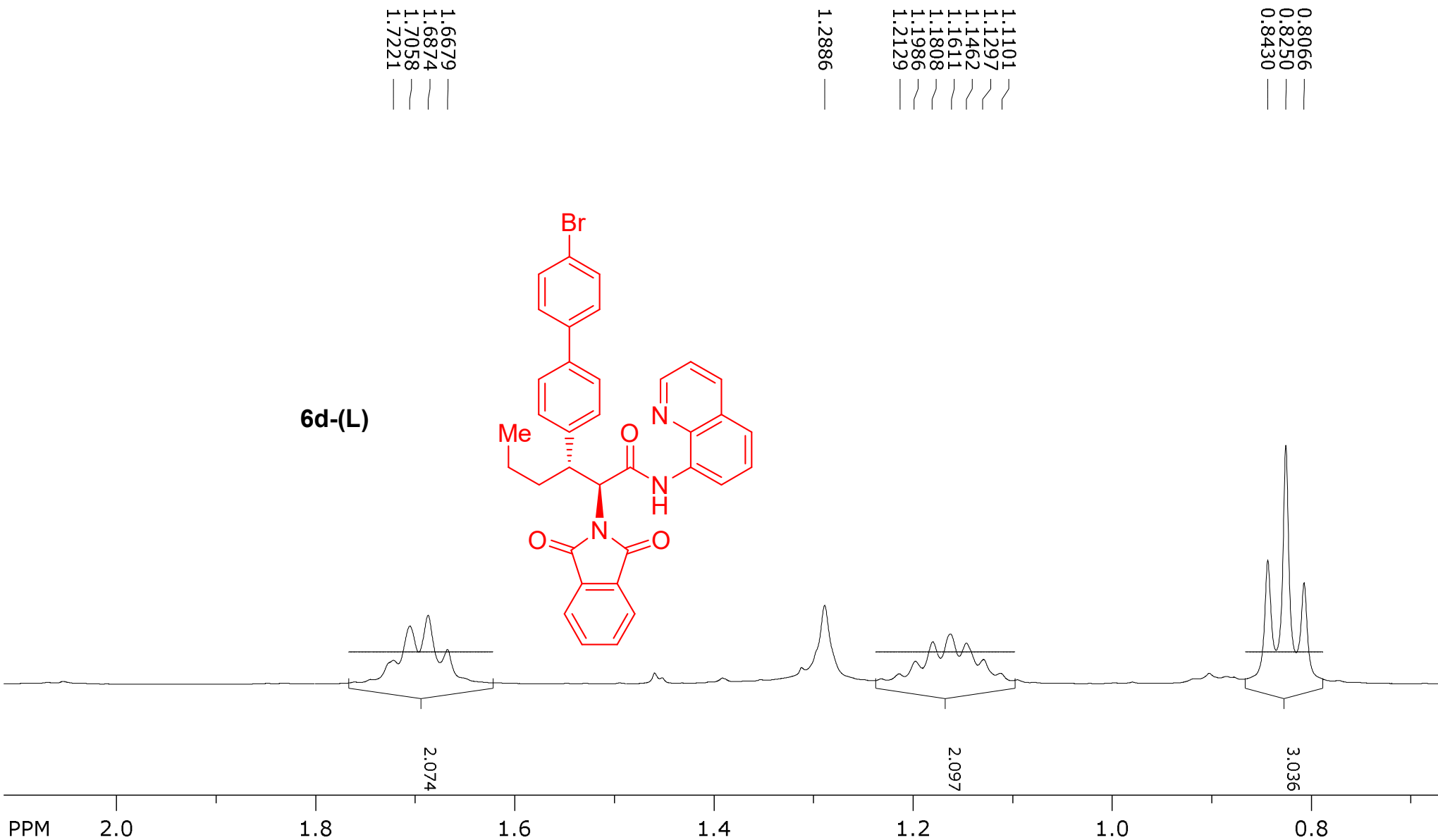
5.3948 —
5.4239 —

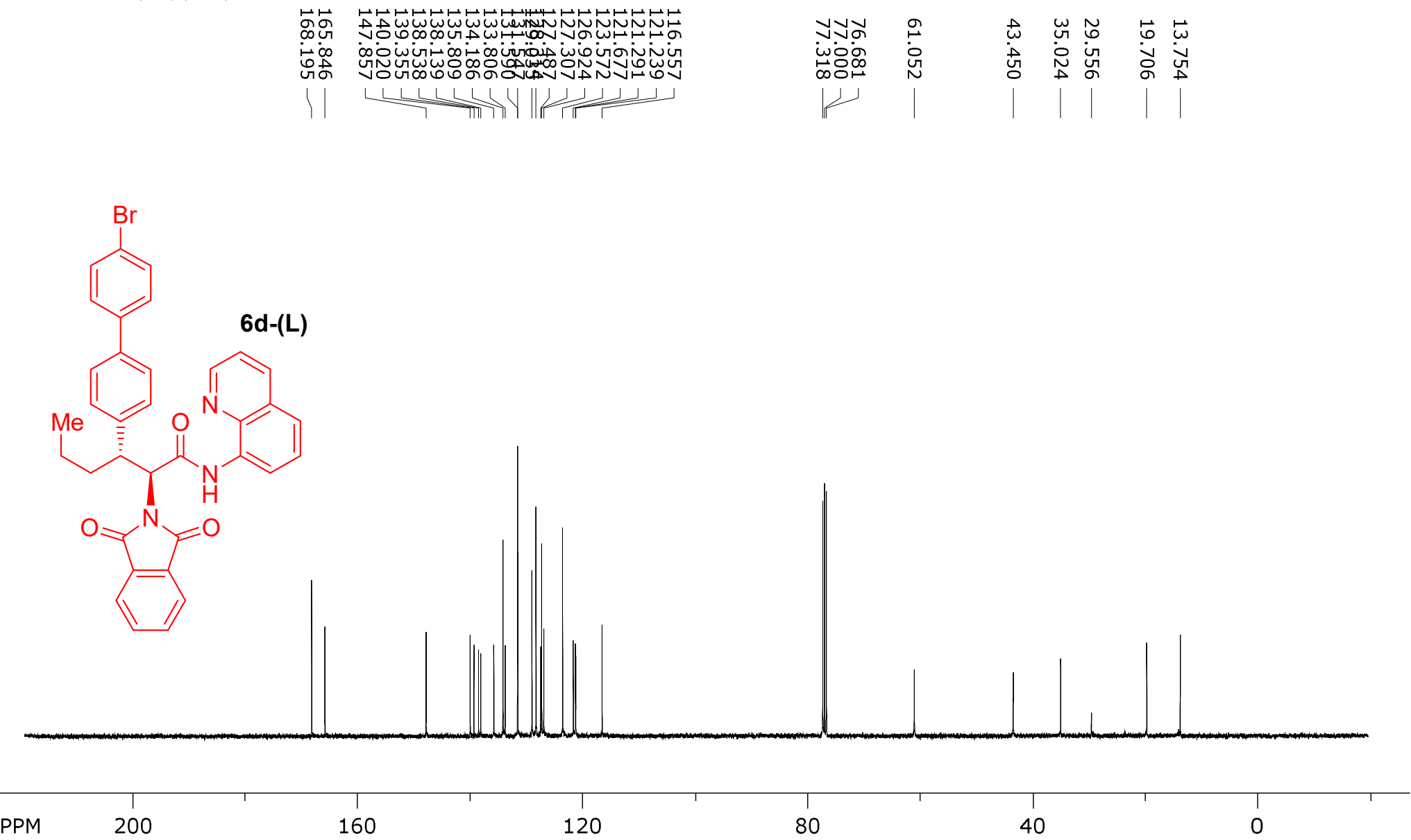
4.2997
4.3276
4.3370
4.3476
4.3658

6d-(L)

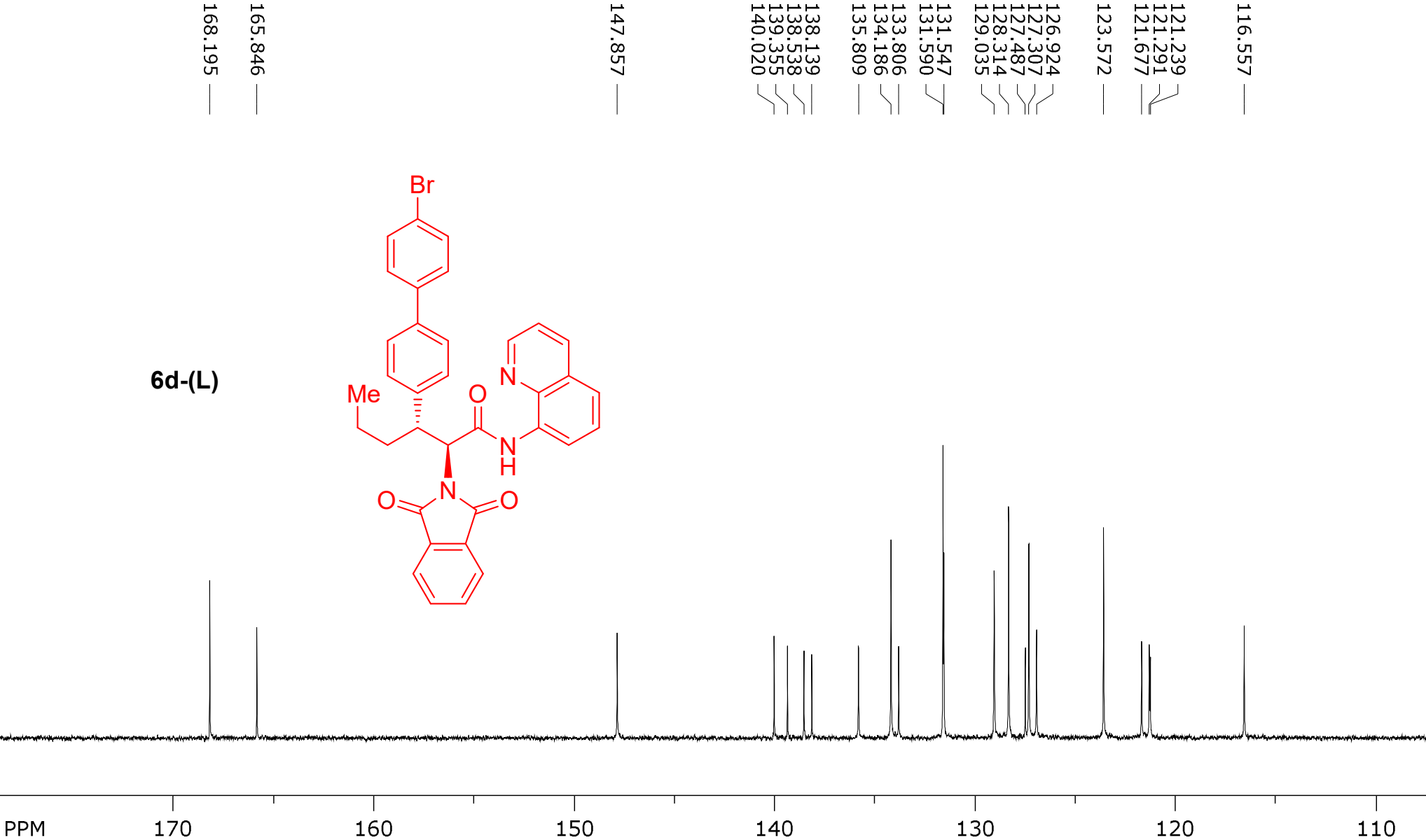
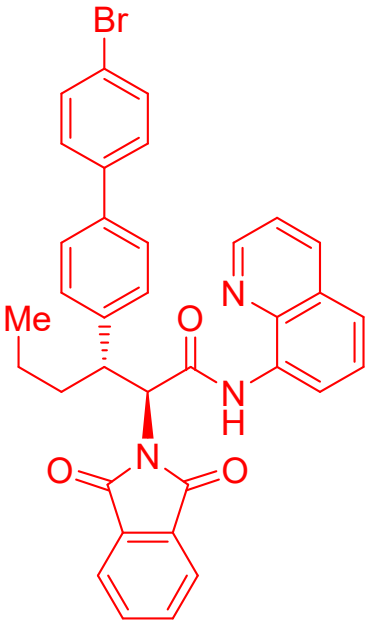


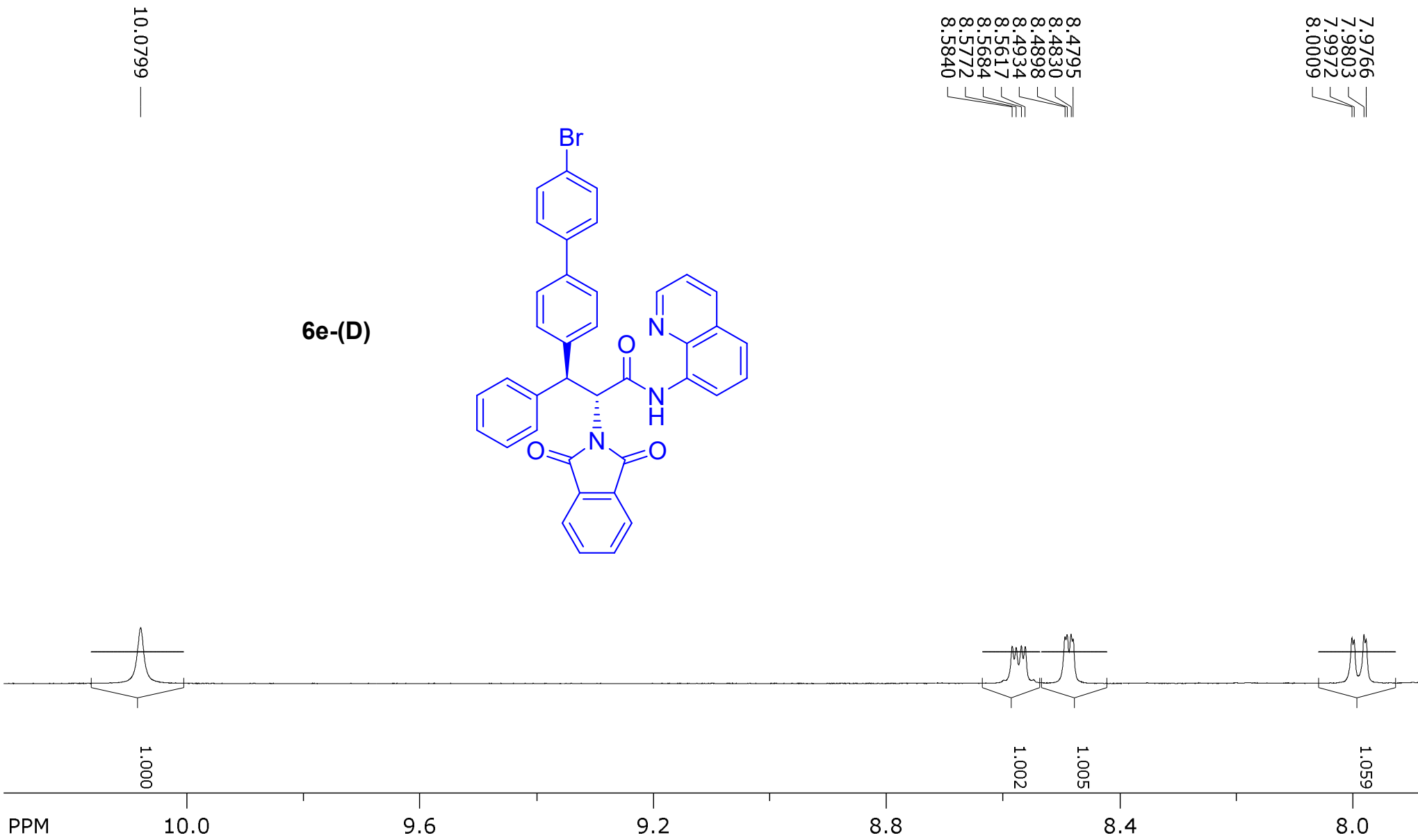
6d-(L)

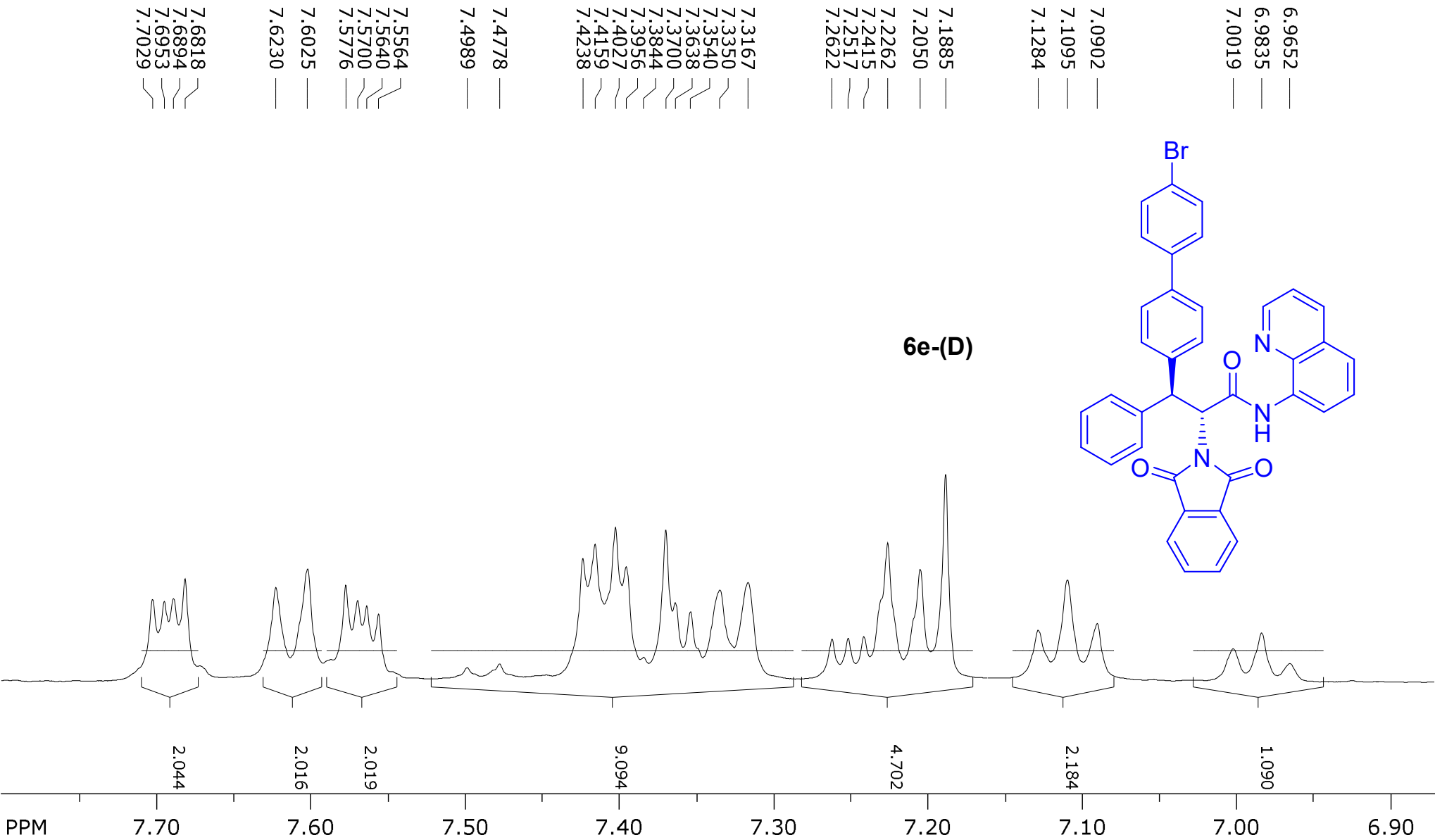


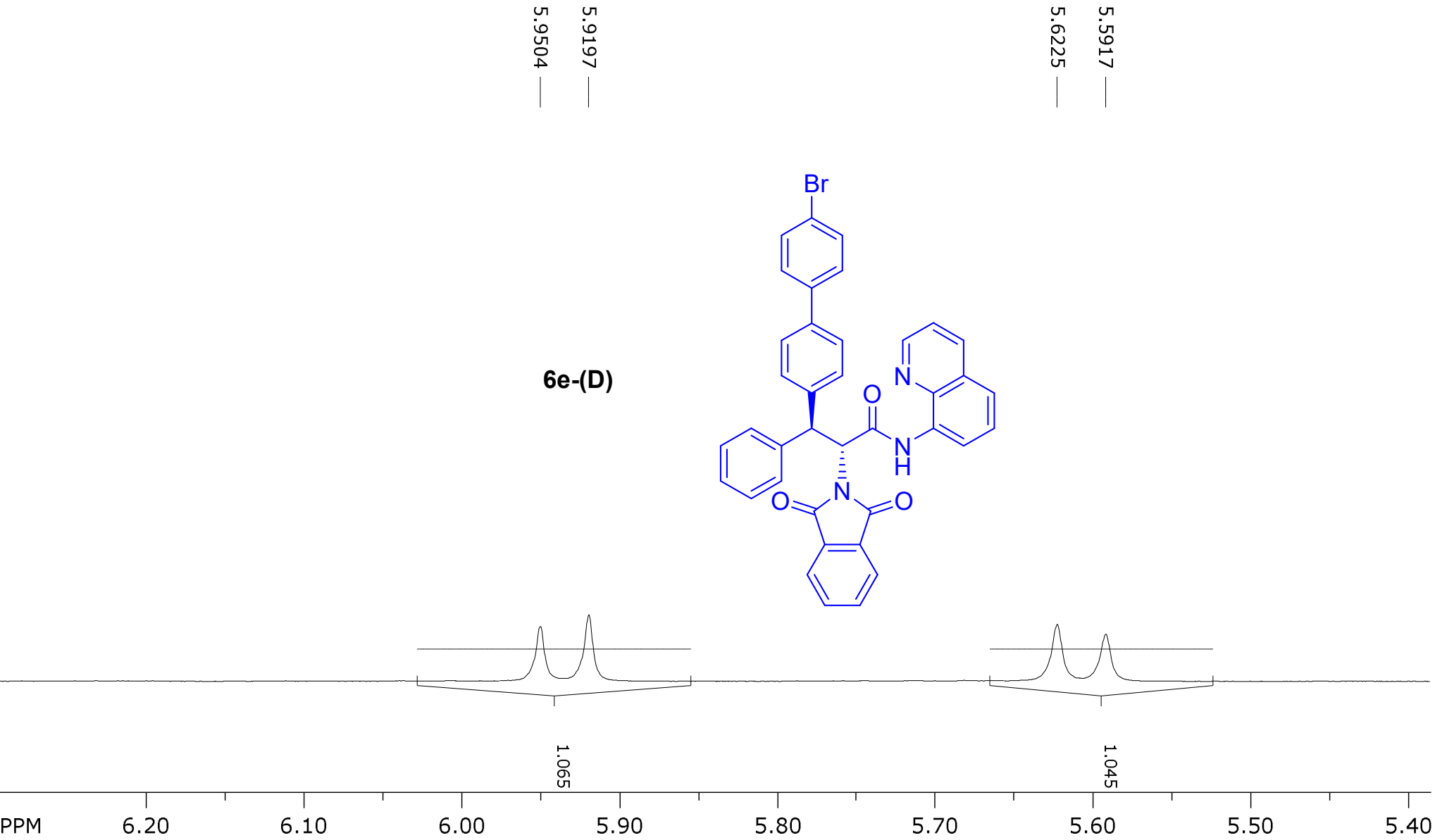


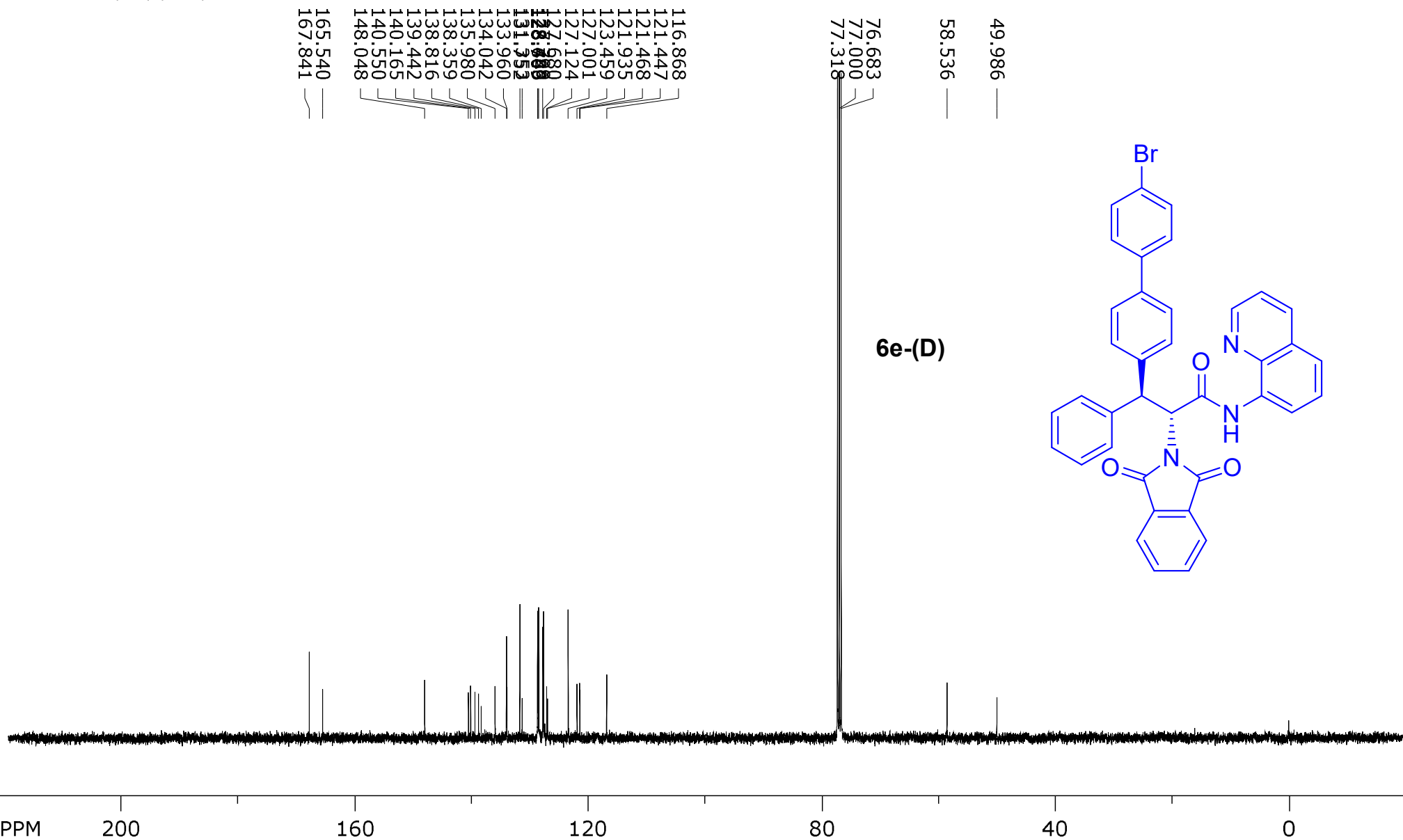
6d-(L)

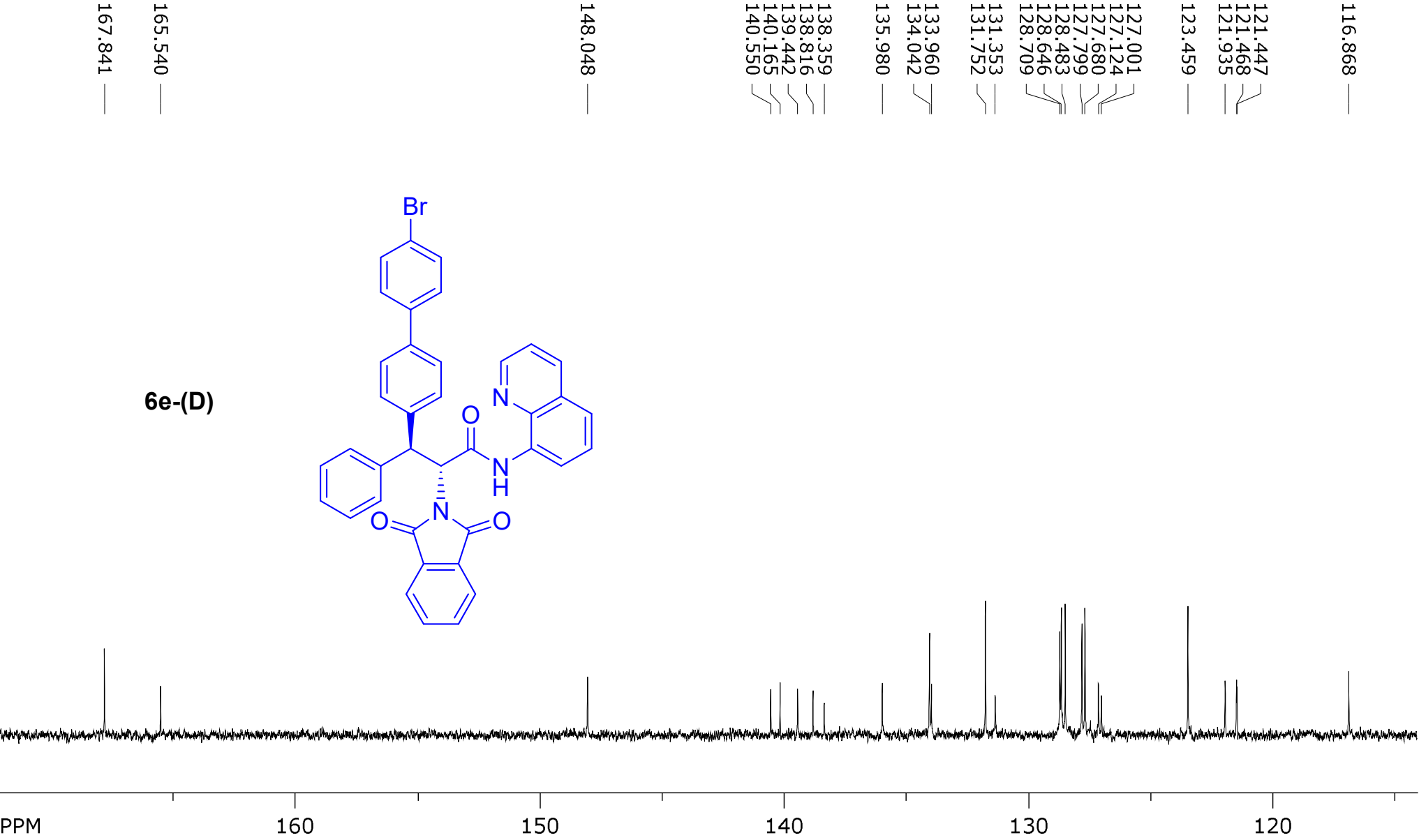


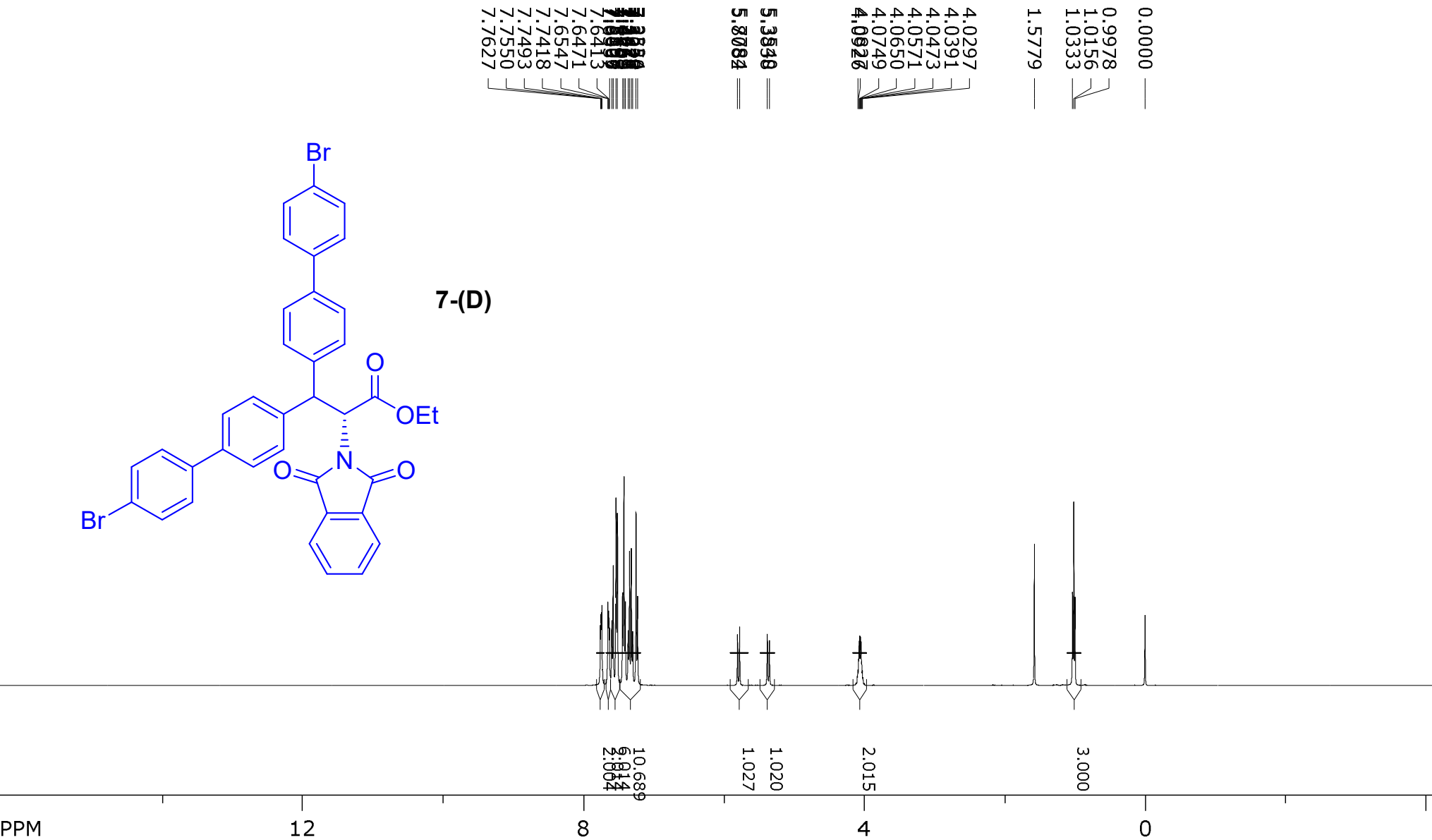


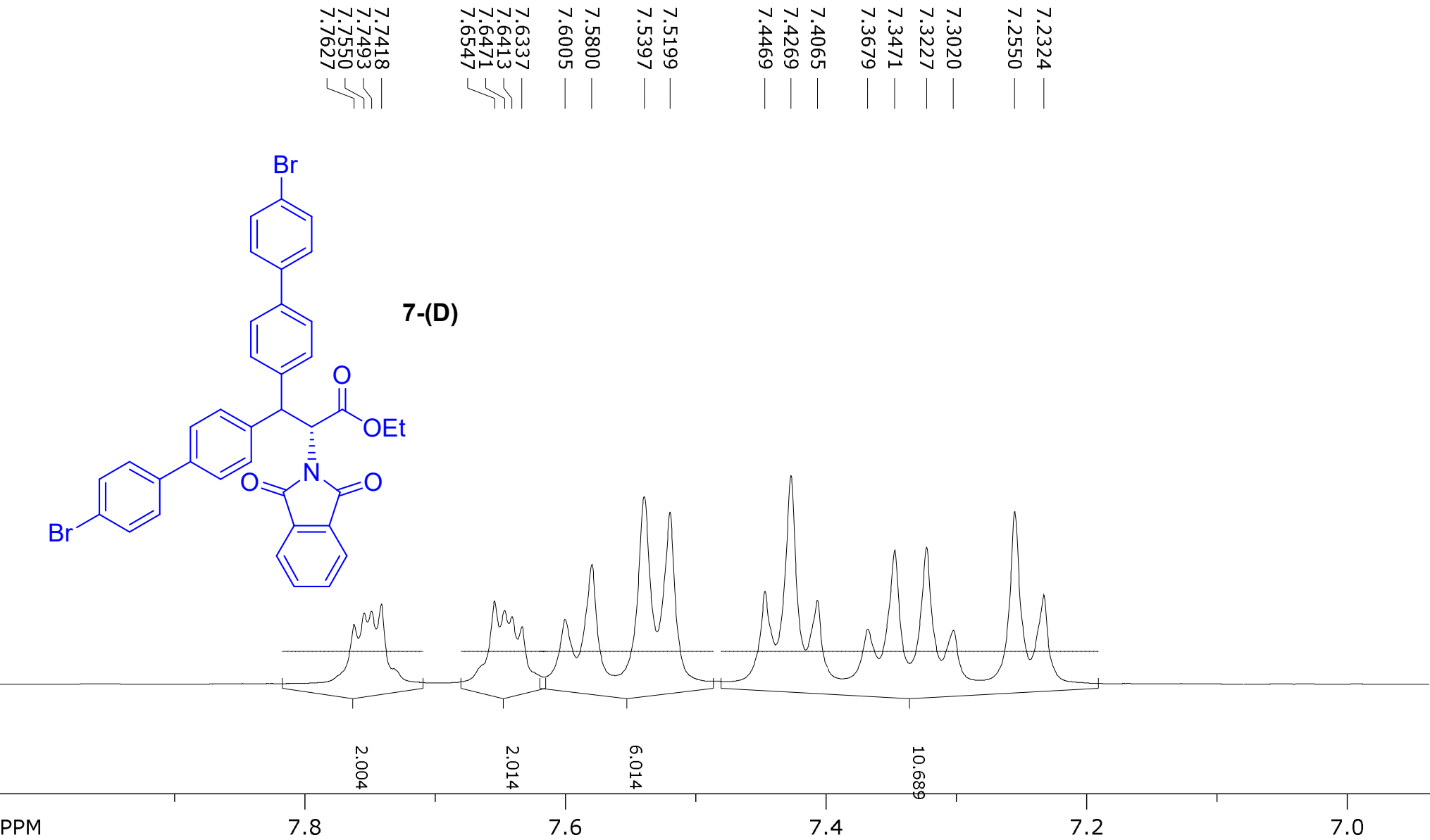


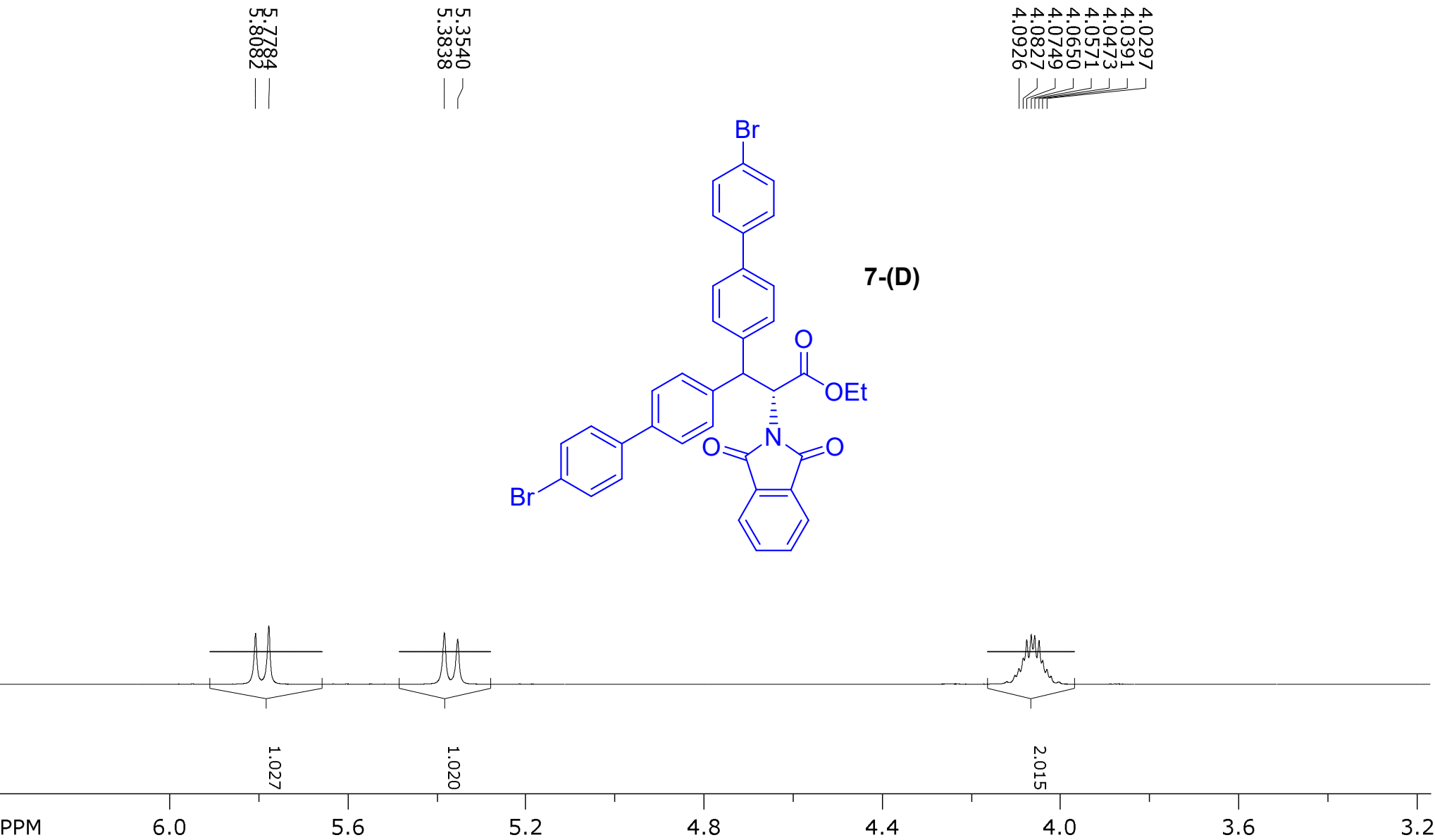


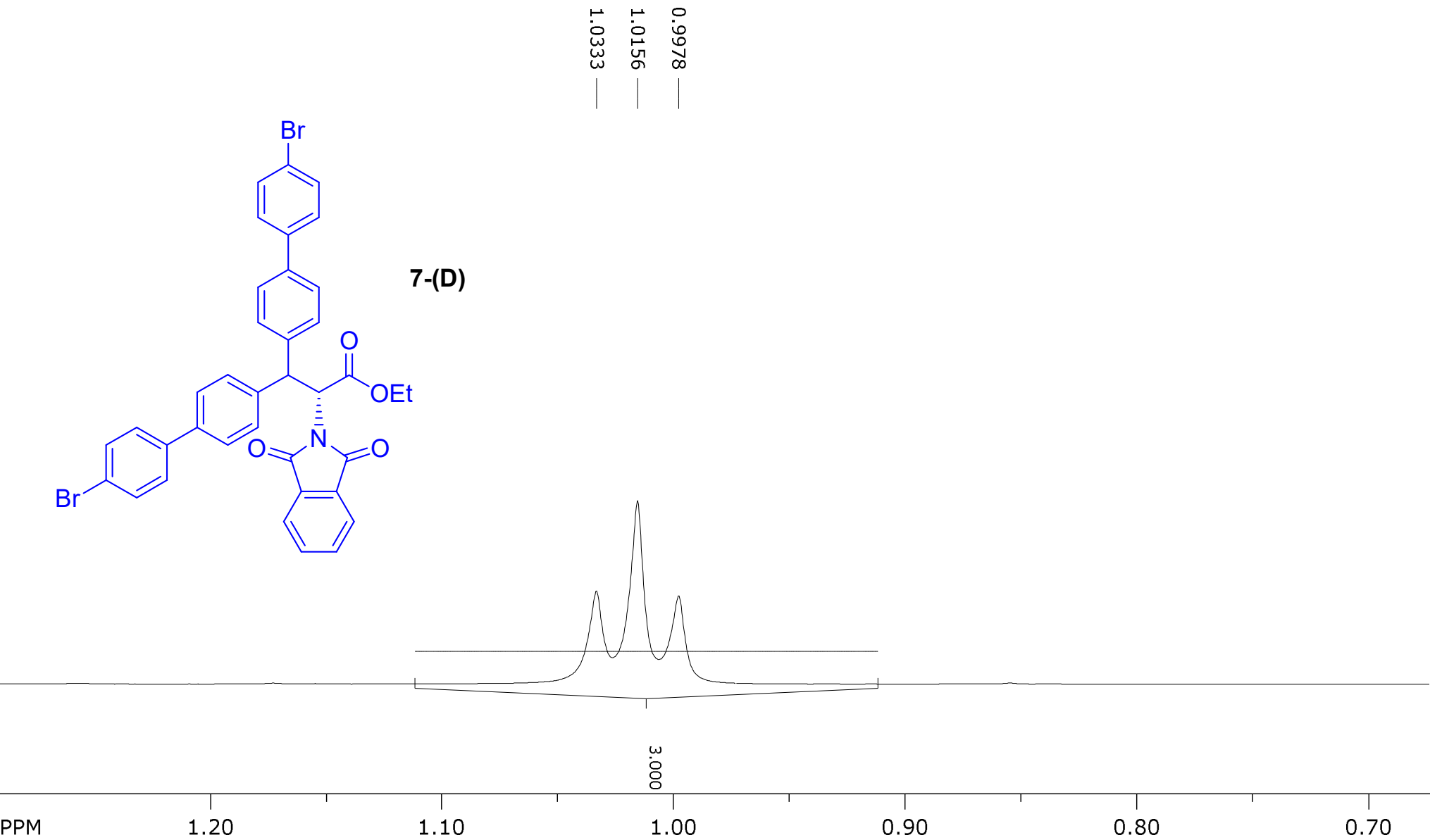


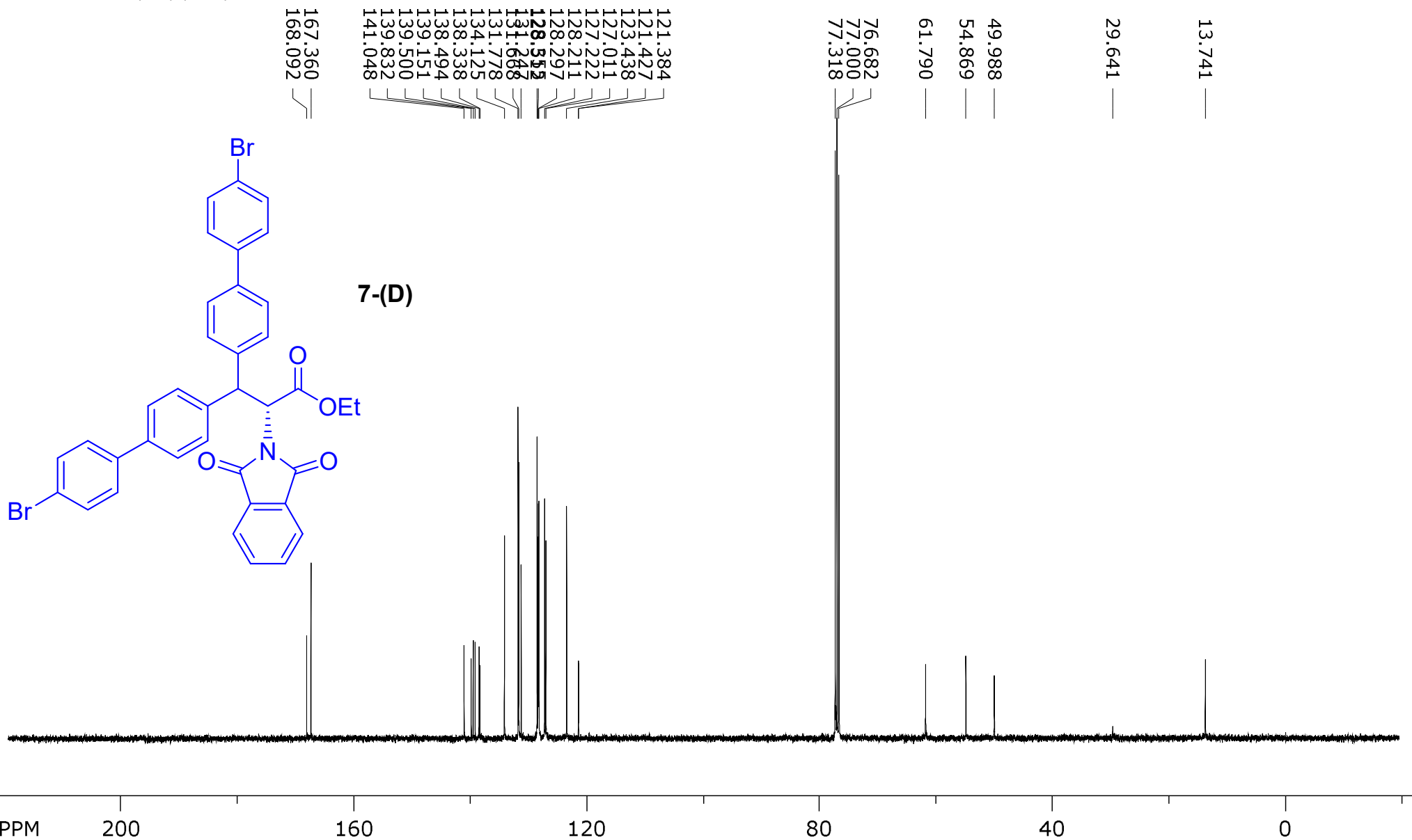


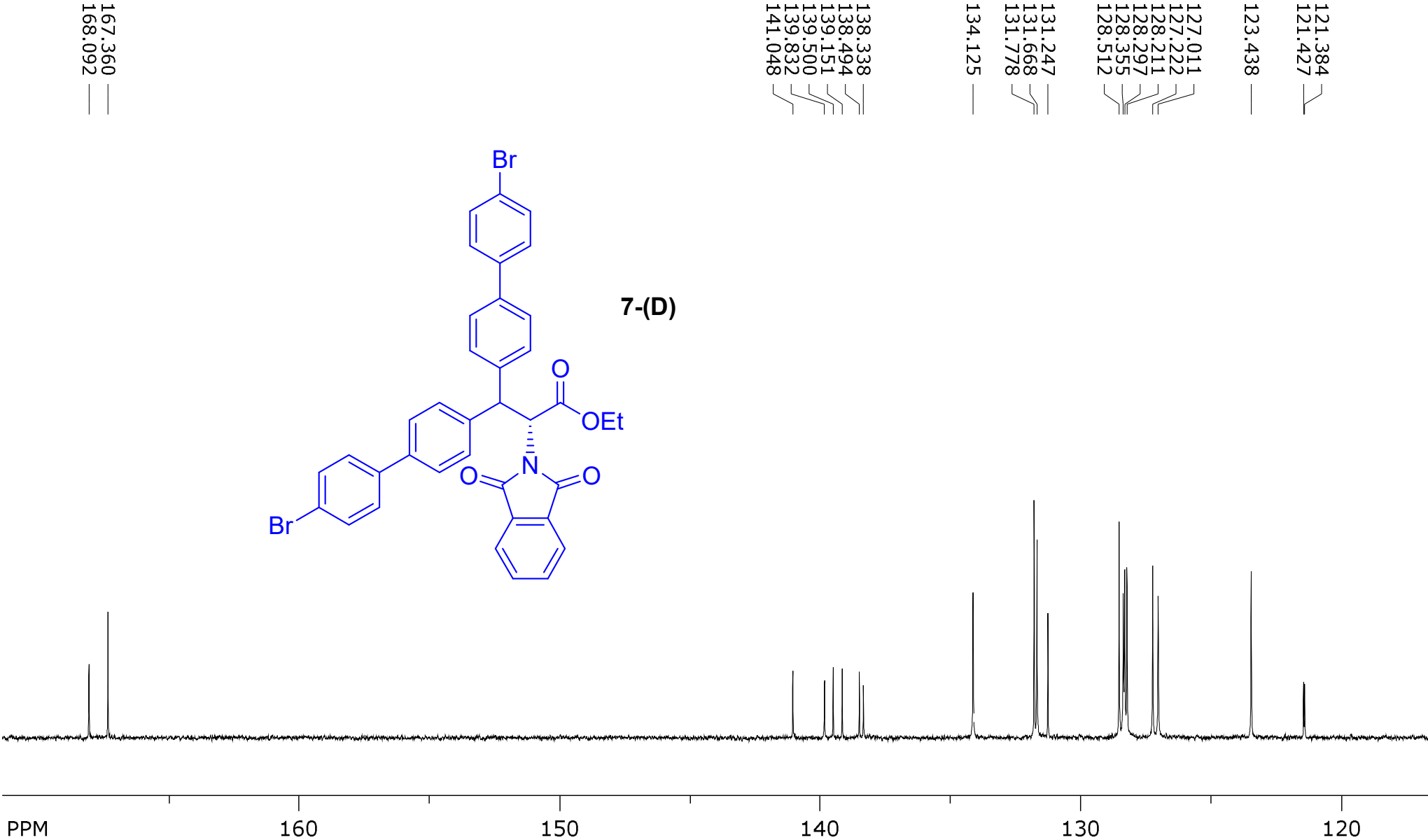


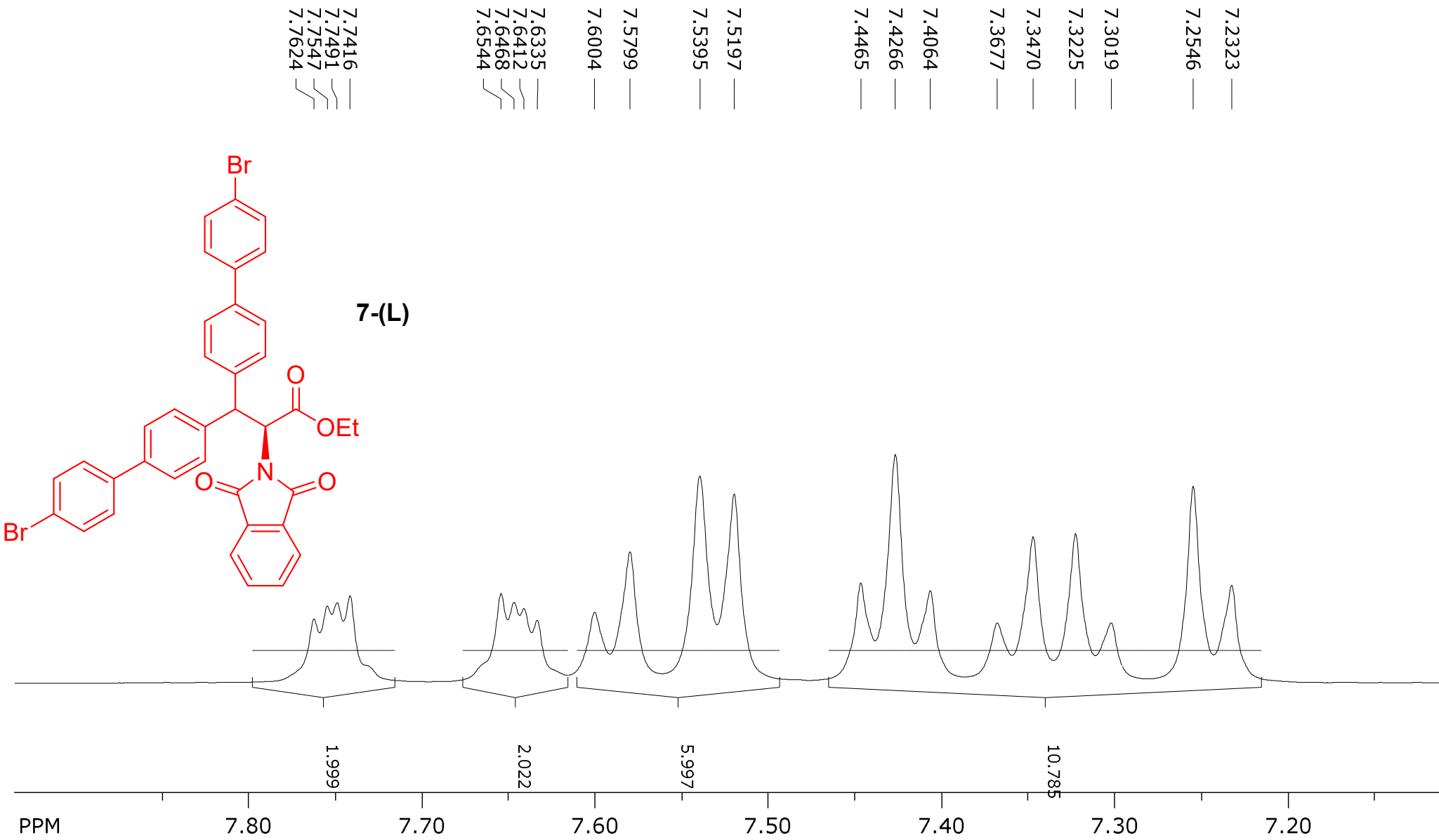


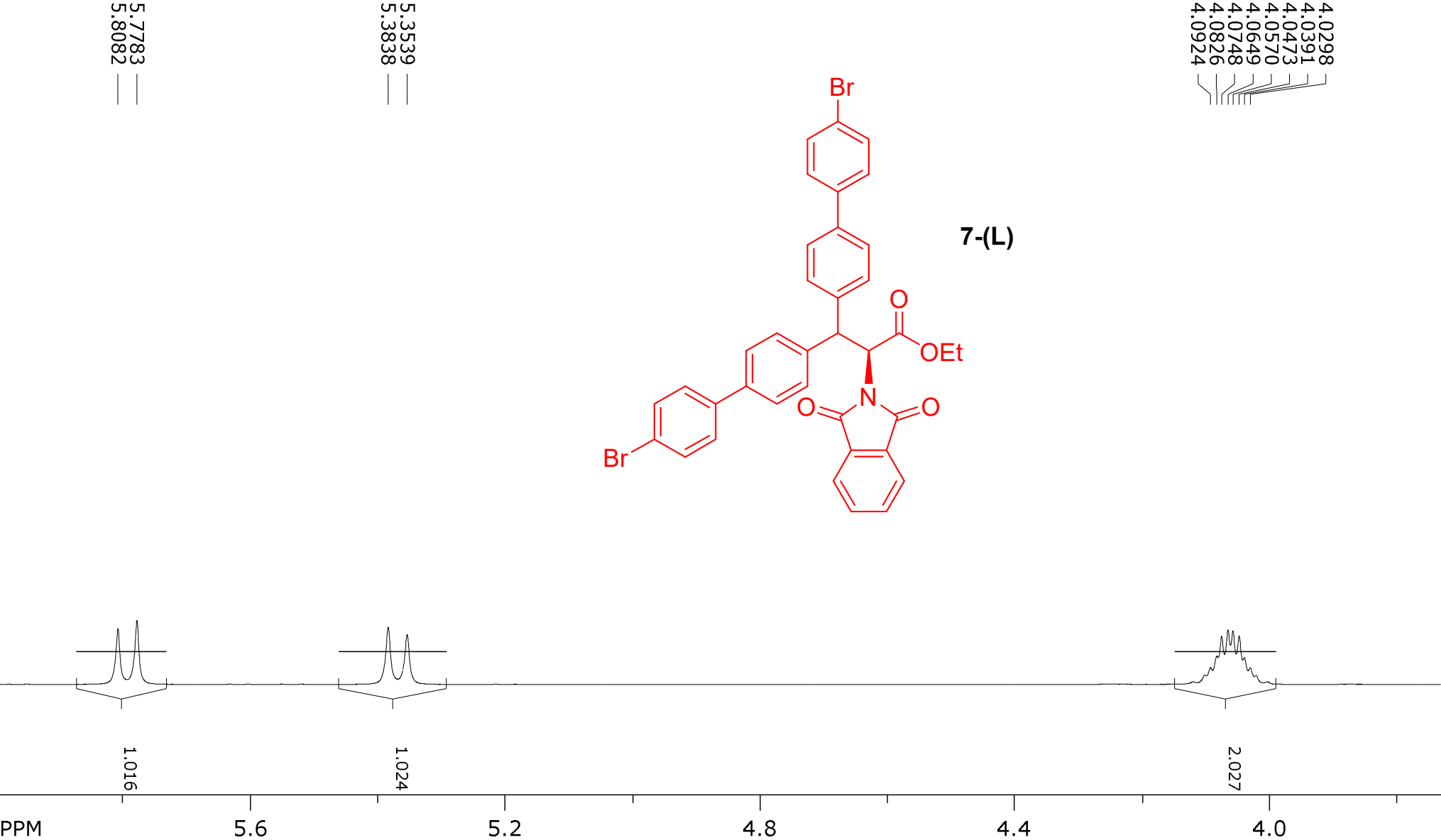


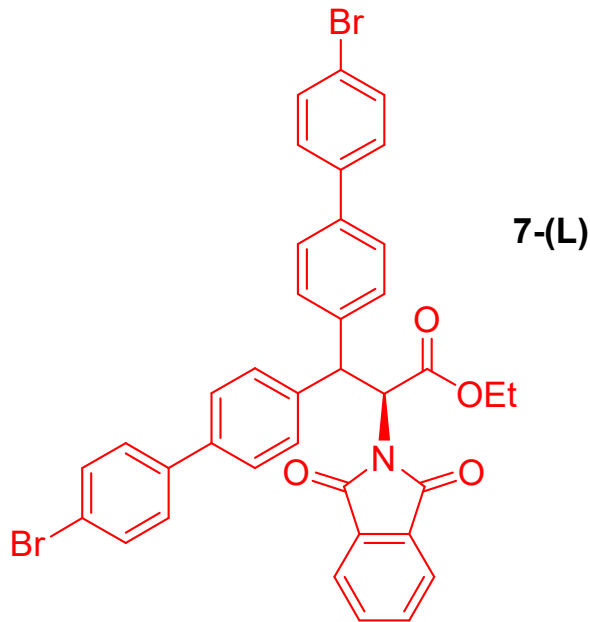




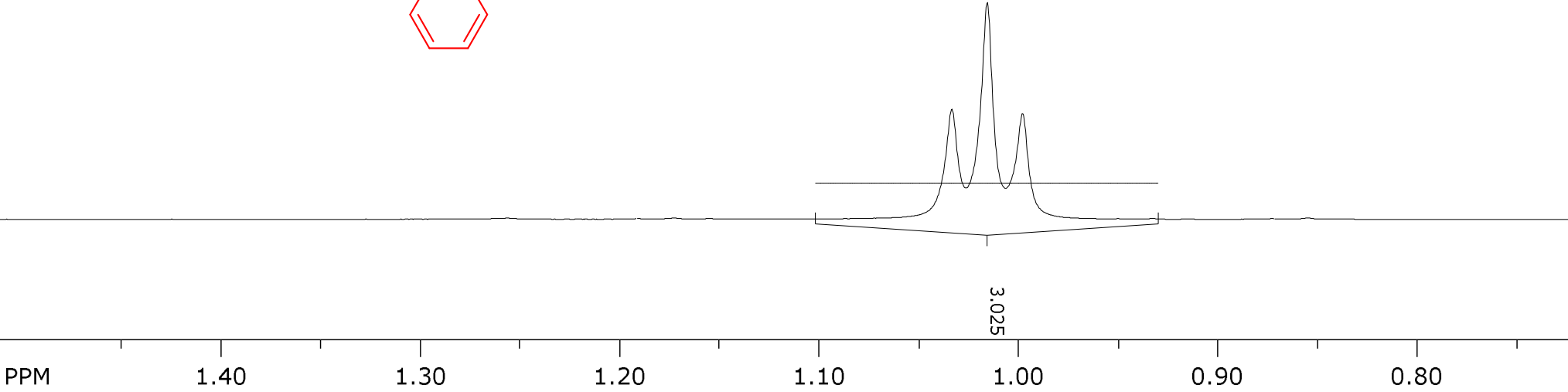


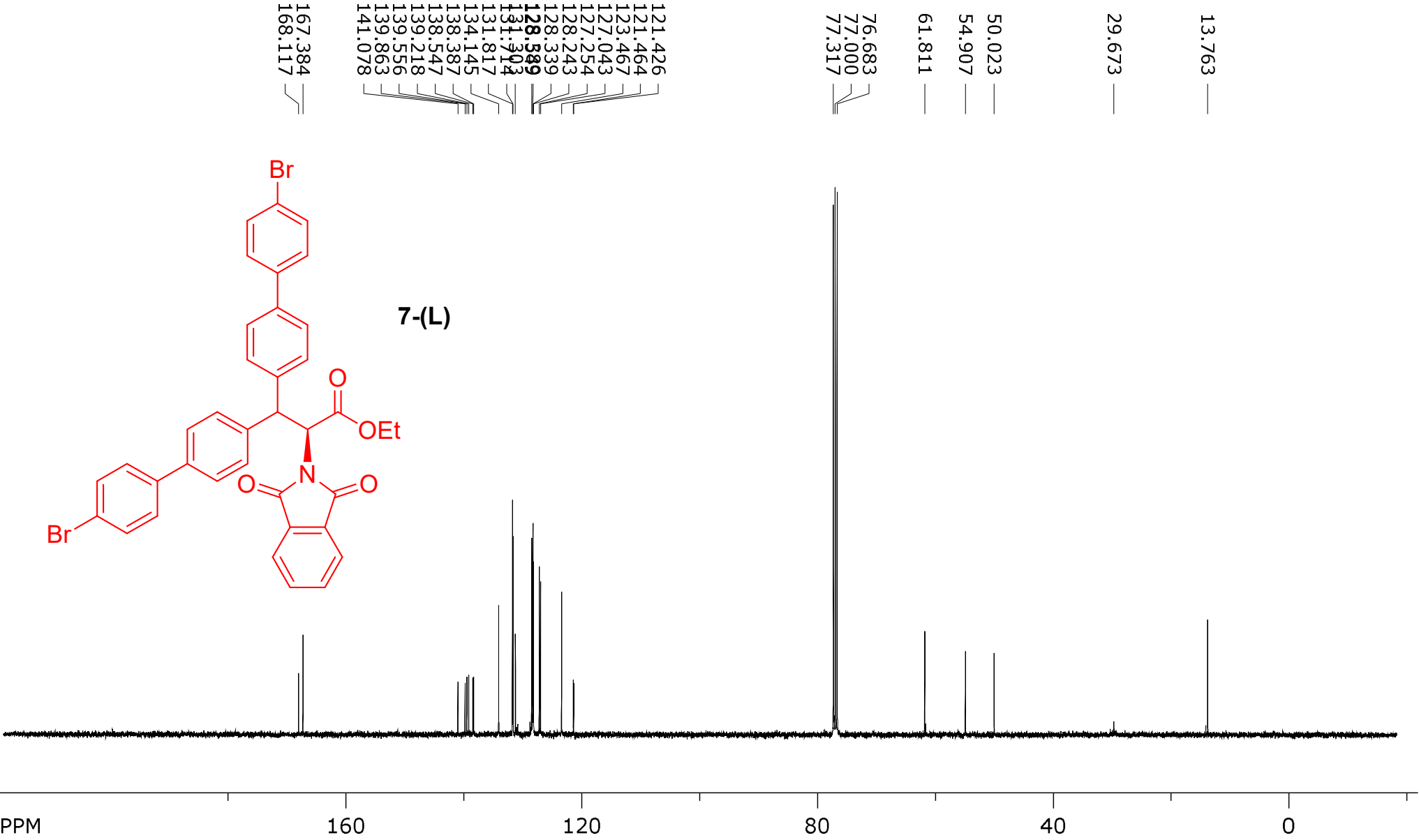


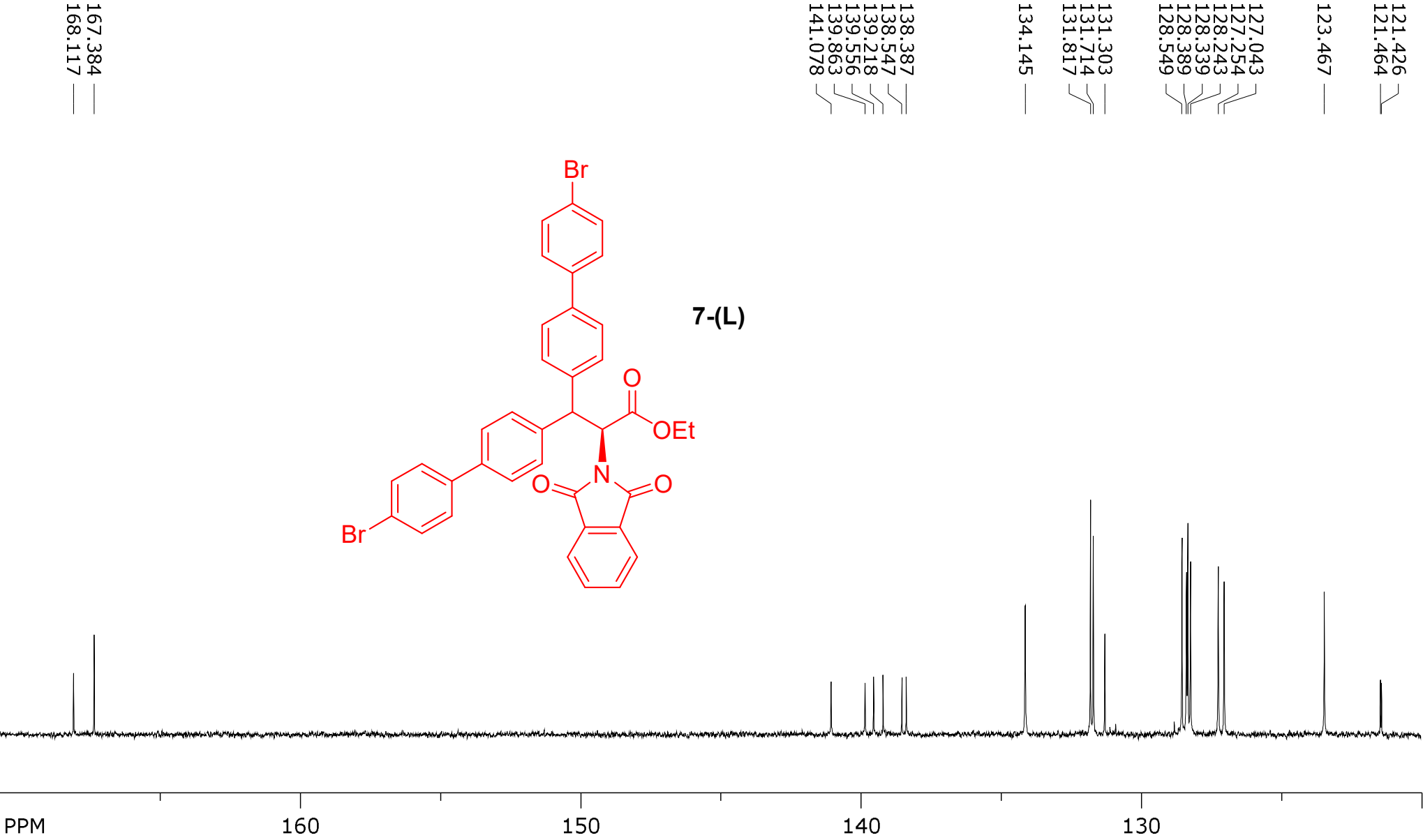


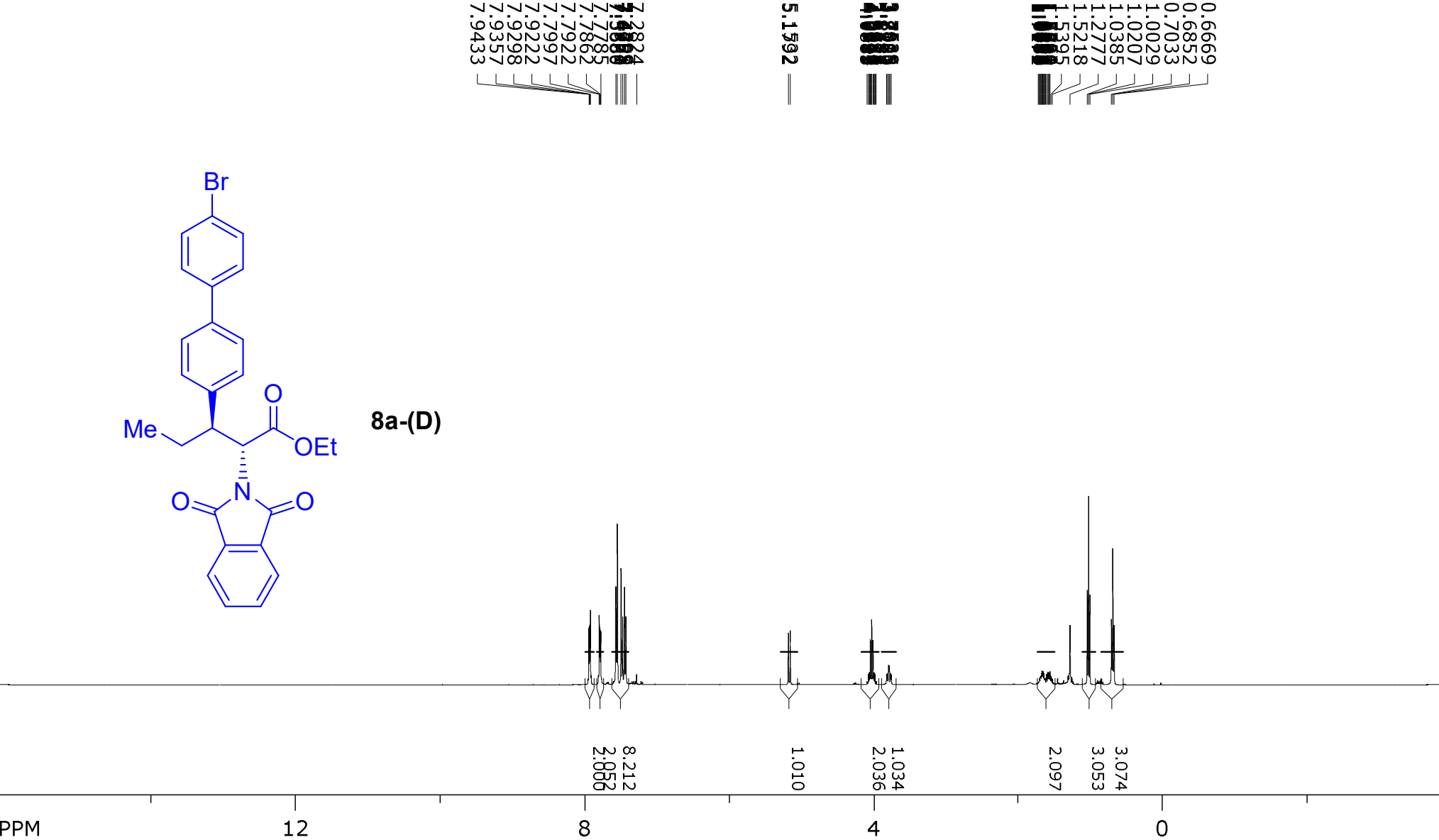


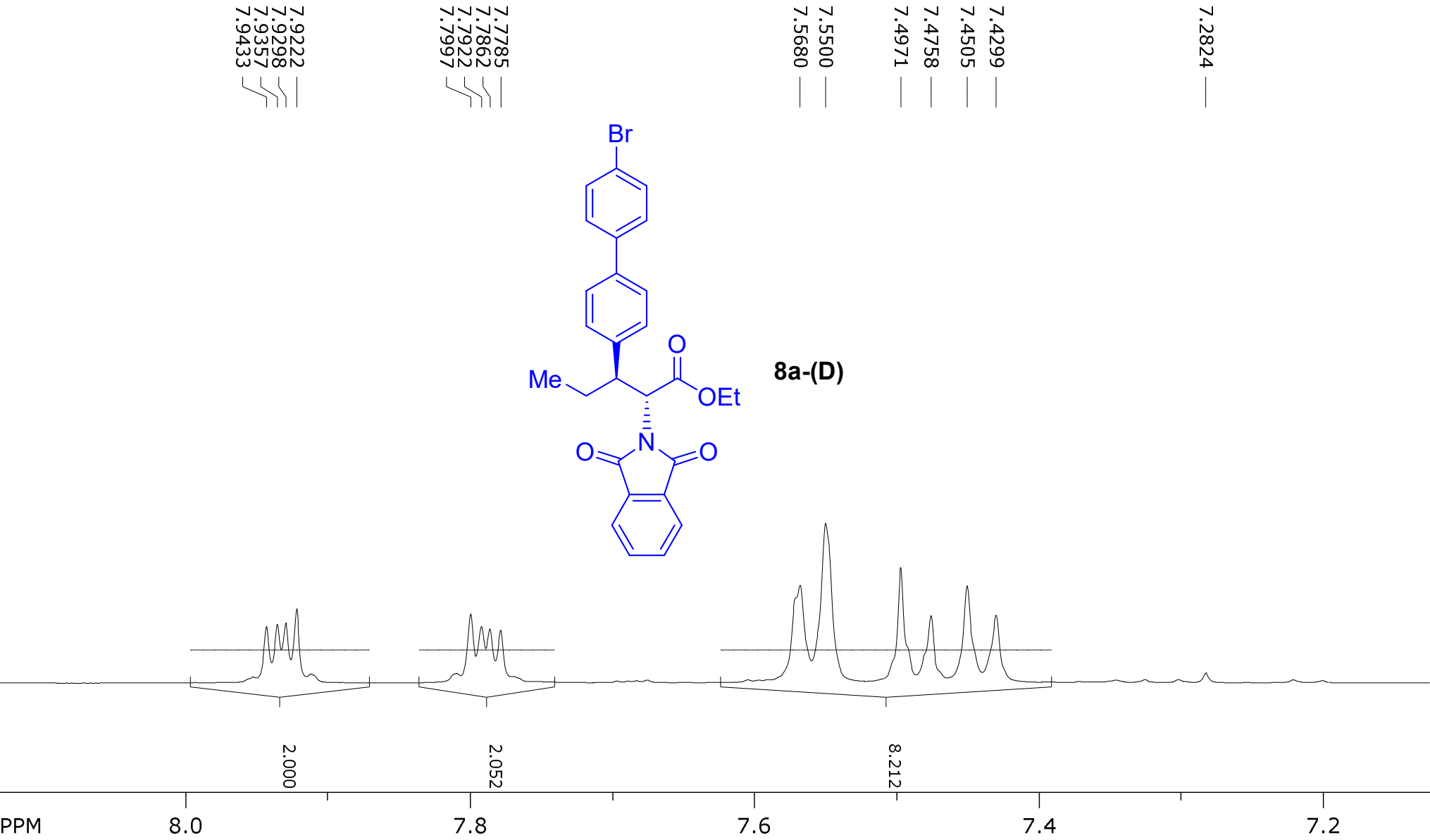
0.9978
1.0155
1.0333

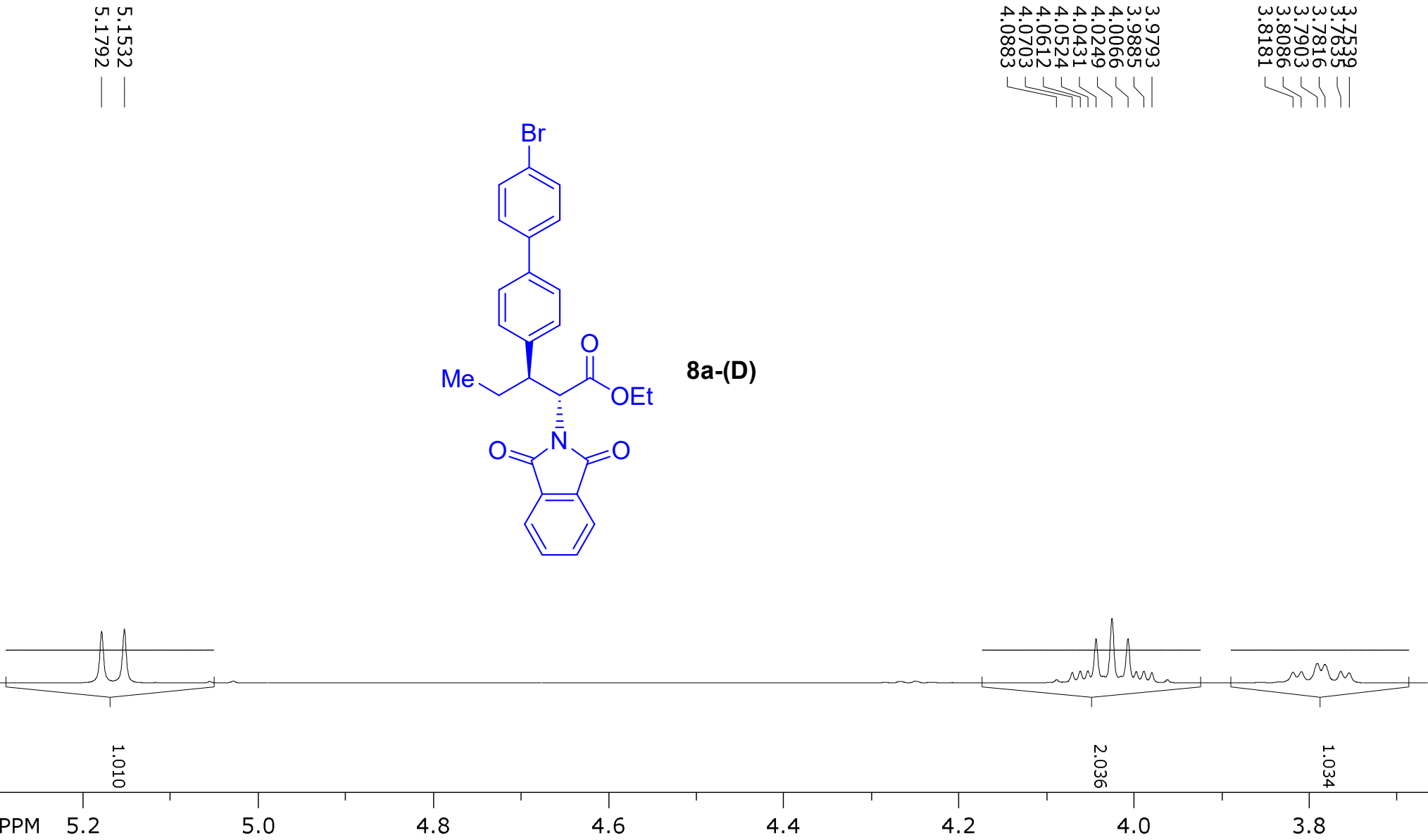


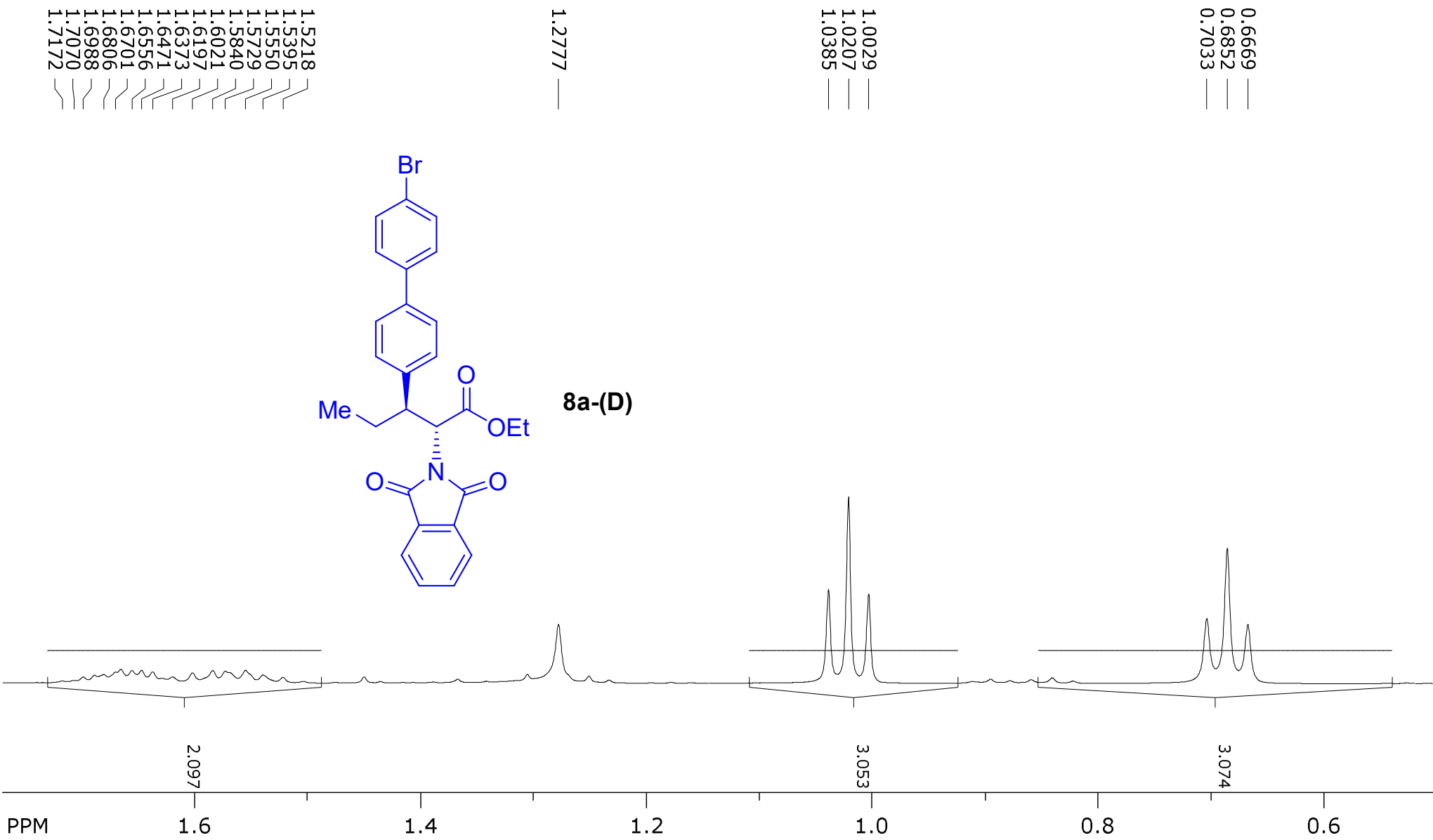


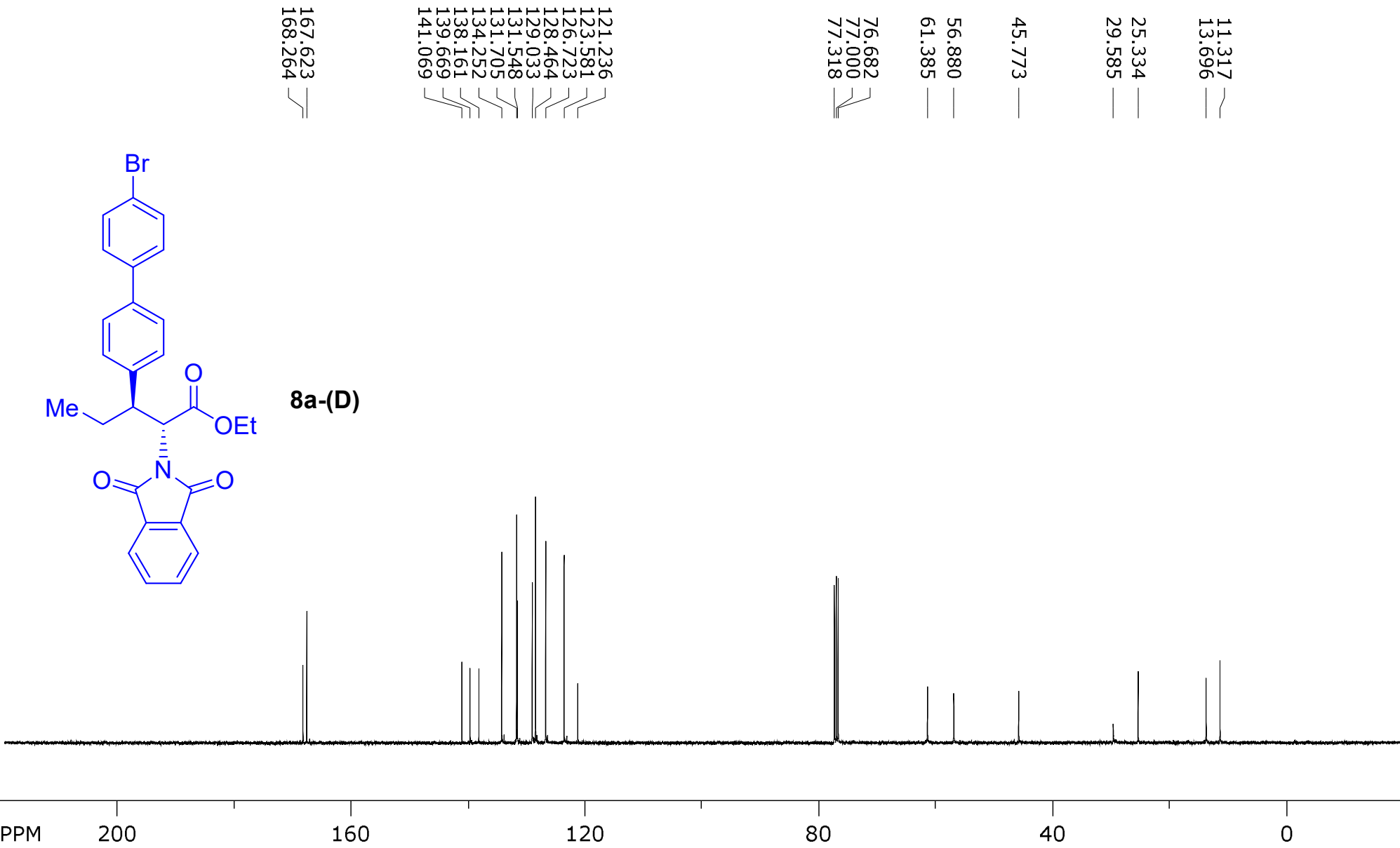


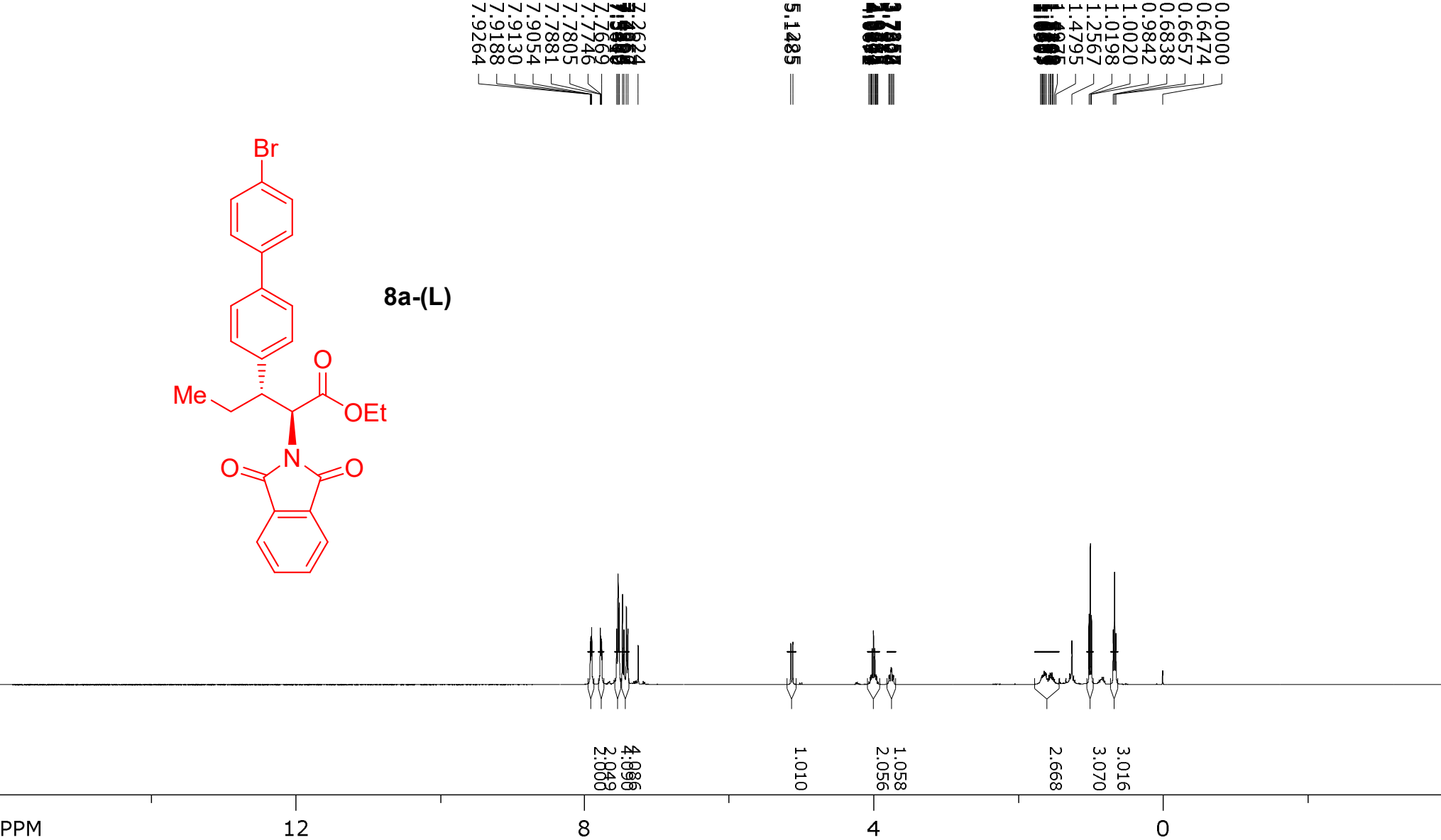


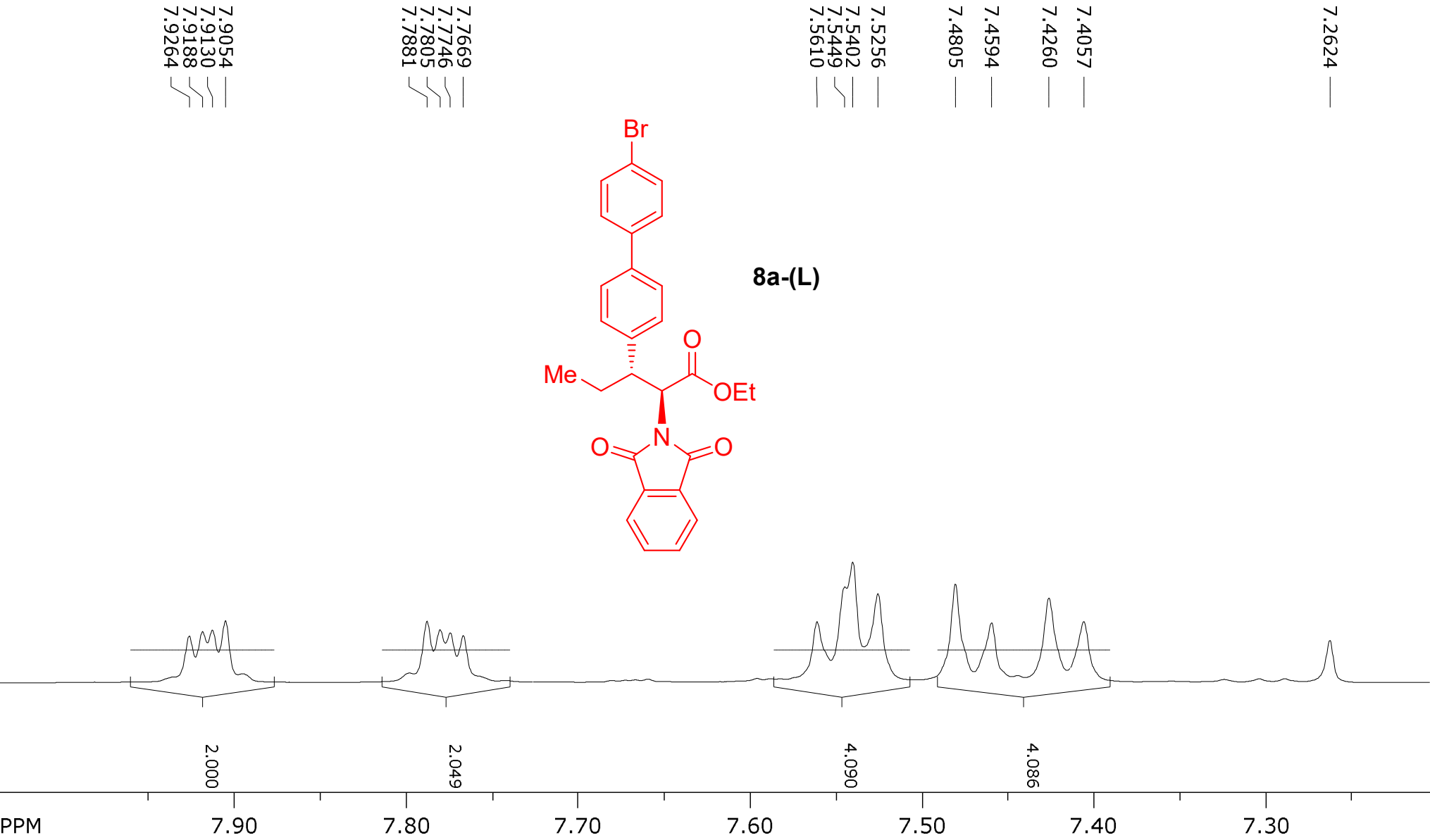






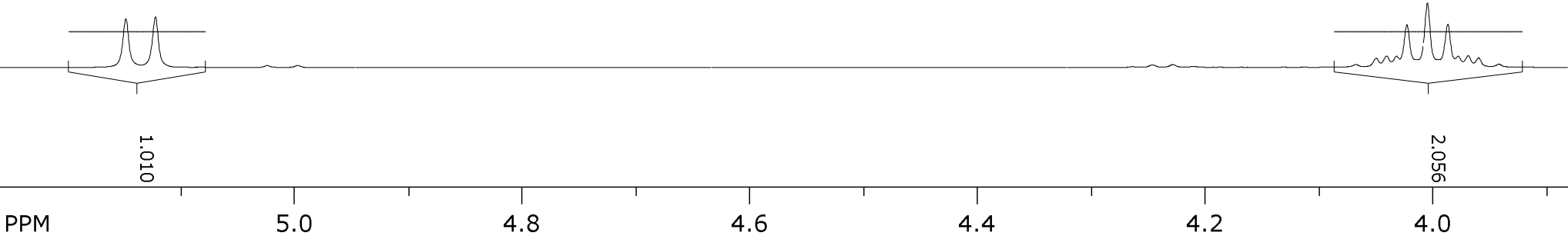
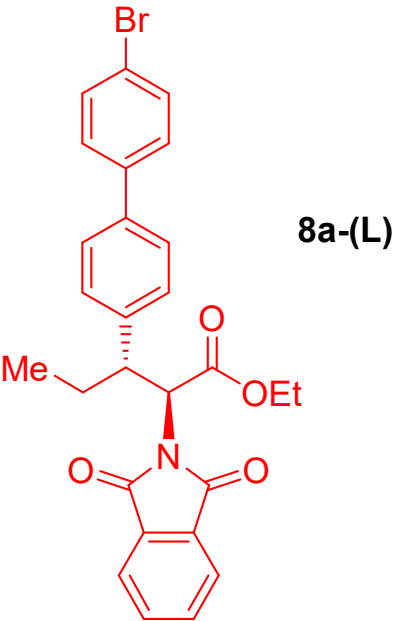




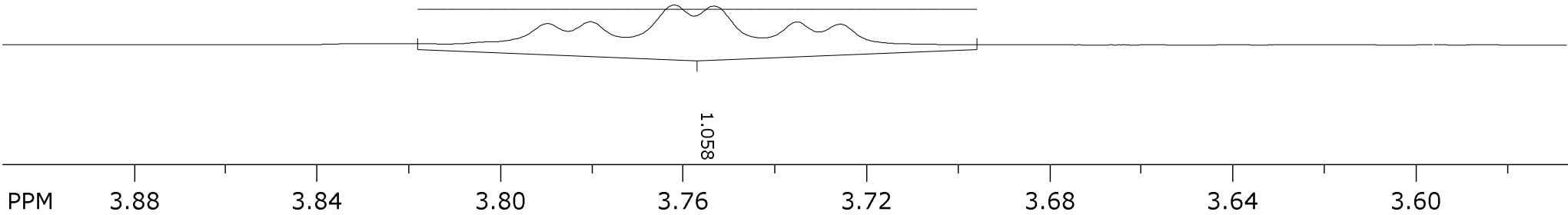
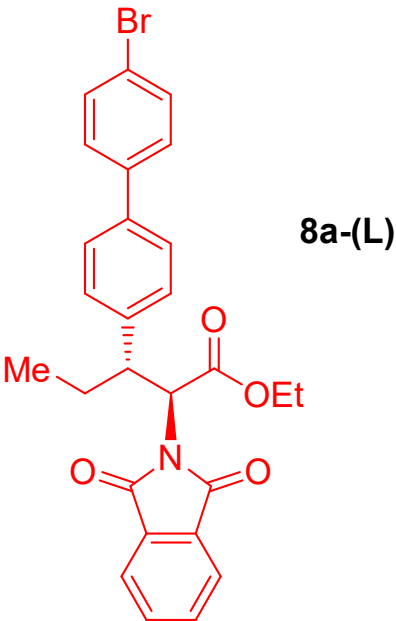


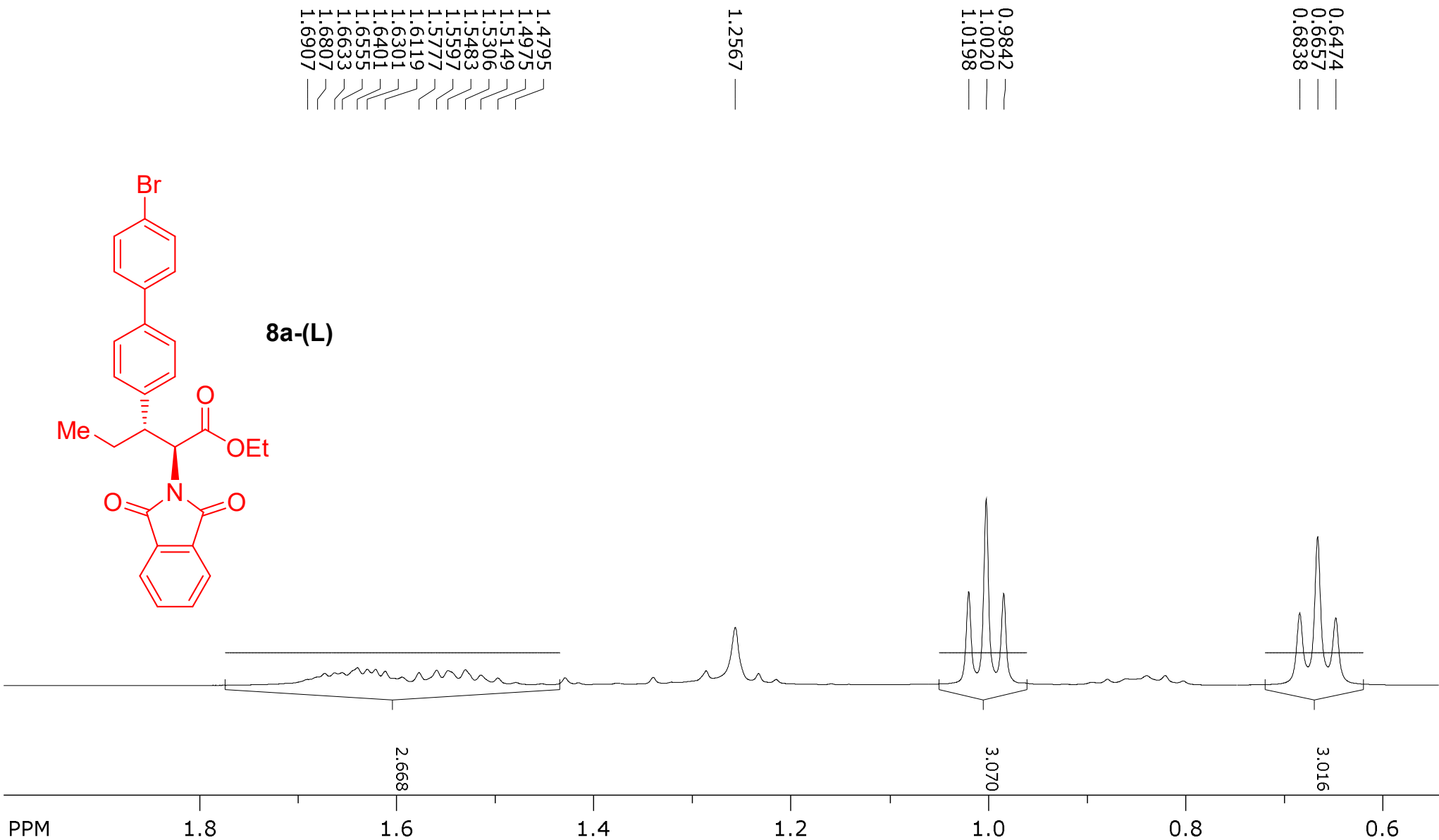
5.1225 —
5.1485 —

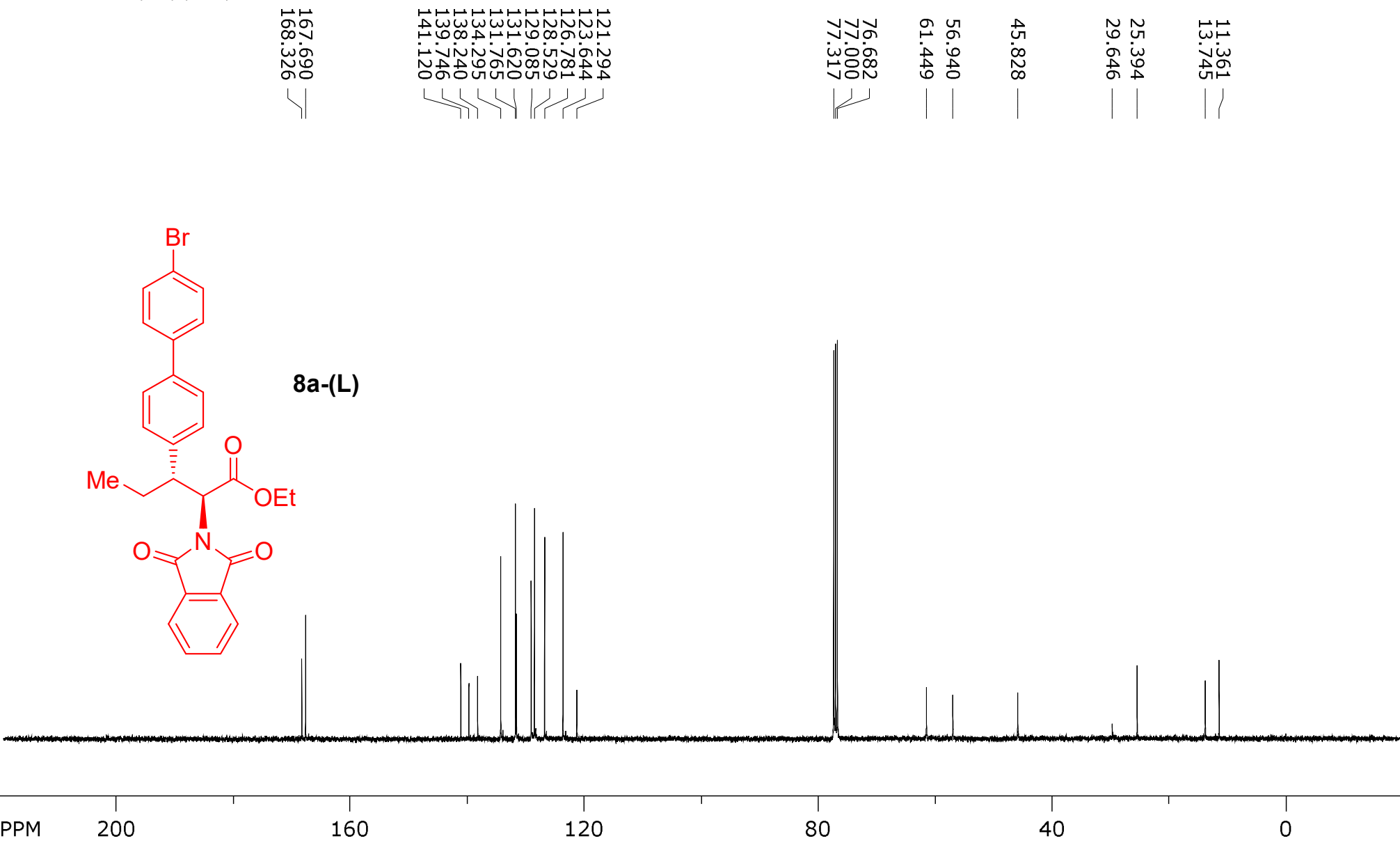
3.9415 —
3.9593 —
3.9685 —
3.9772 —
3.9864 —
4.0043 —
4.0223 —
4.0314 —
4.0402 —
4.0493 —
4.0672 —

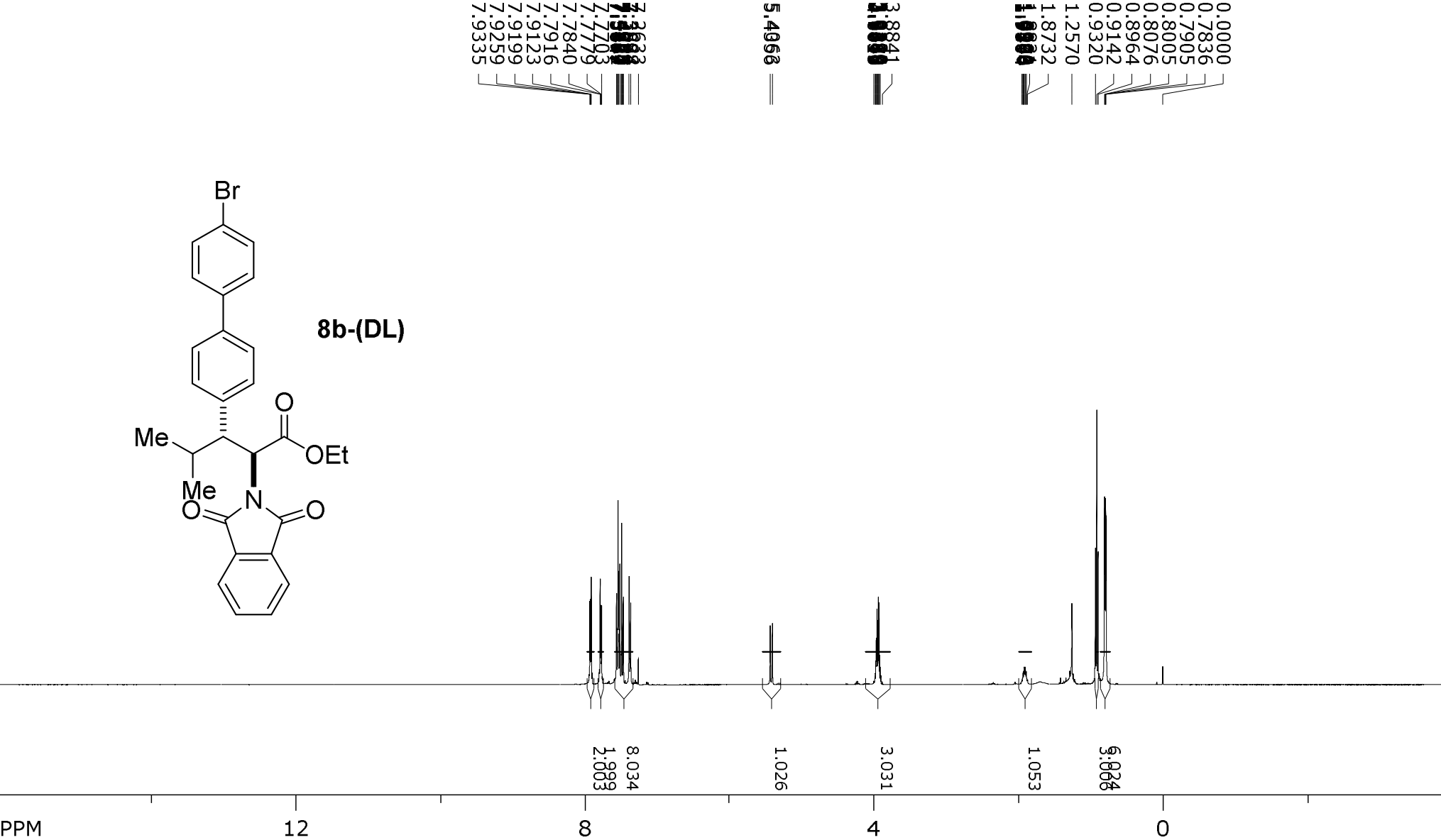


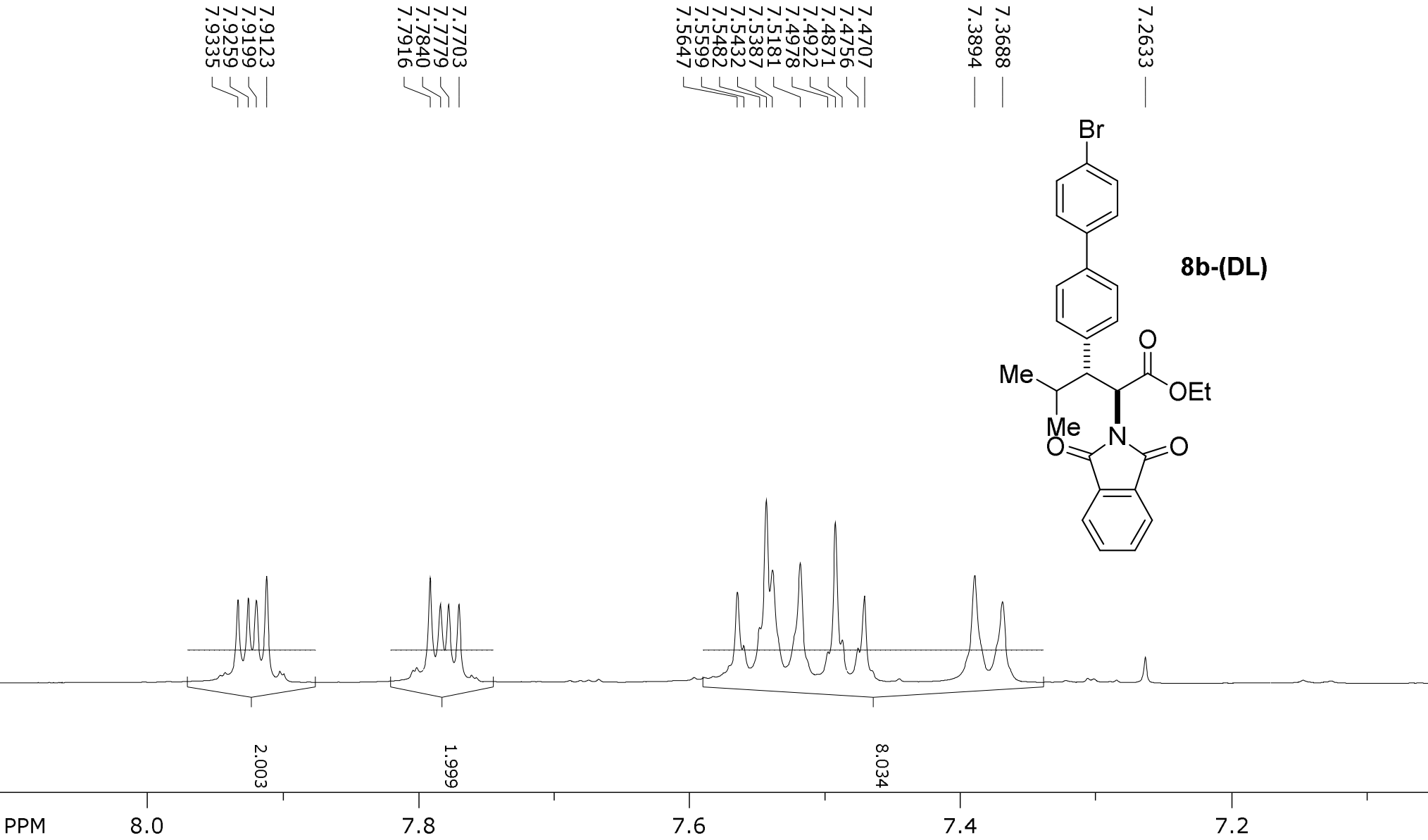
3.7257 —
3.7352 —
3.7533 —
3.7620 —
3.7804 —
3.7898 —

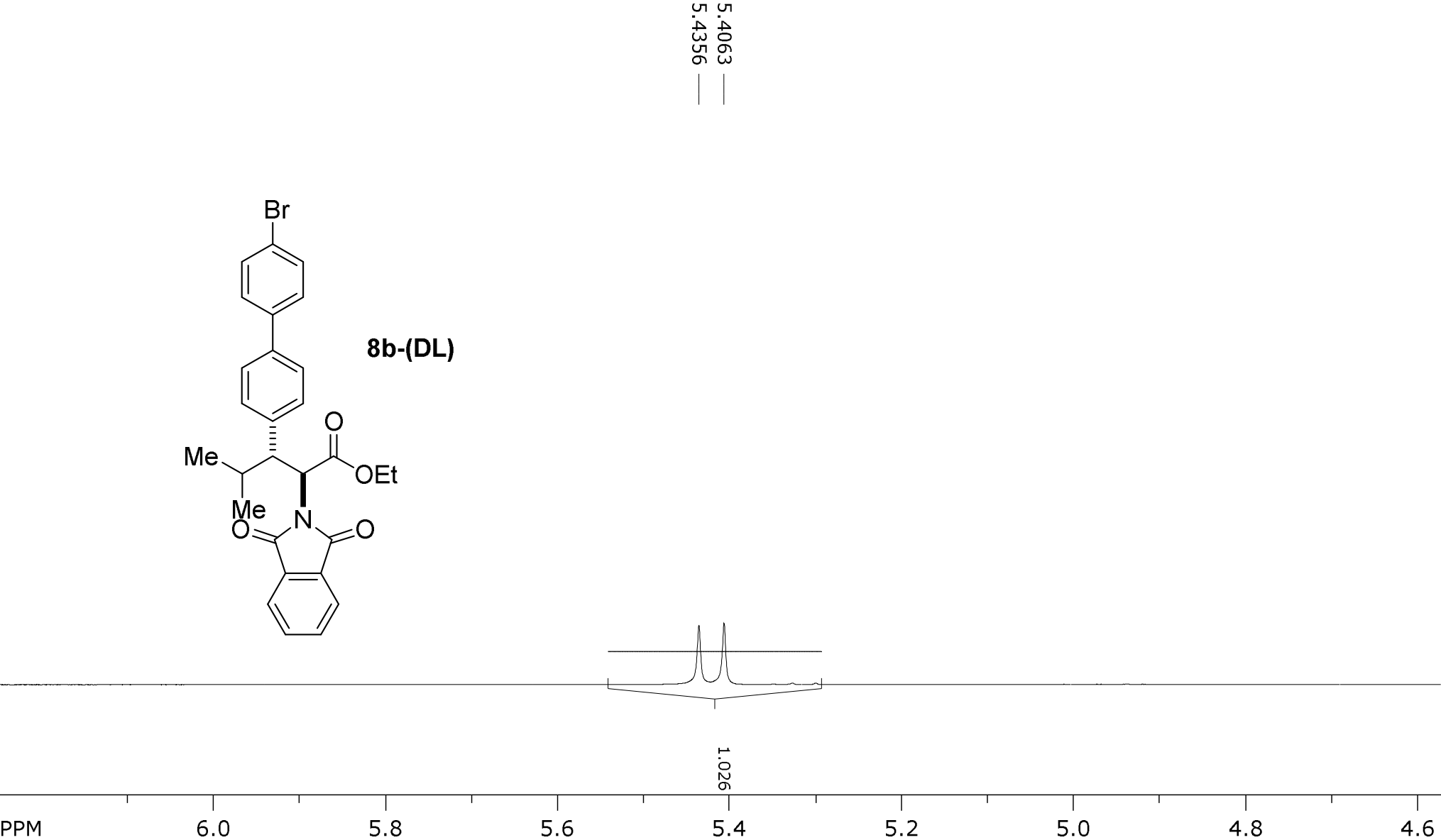
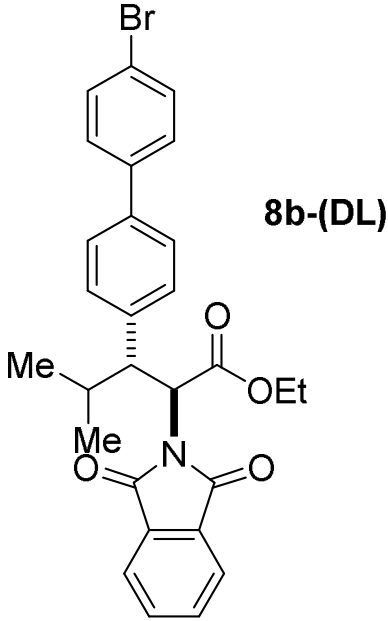




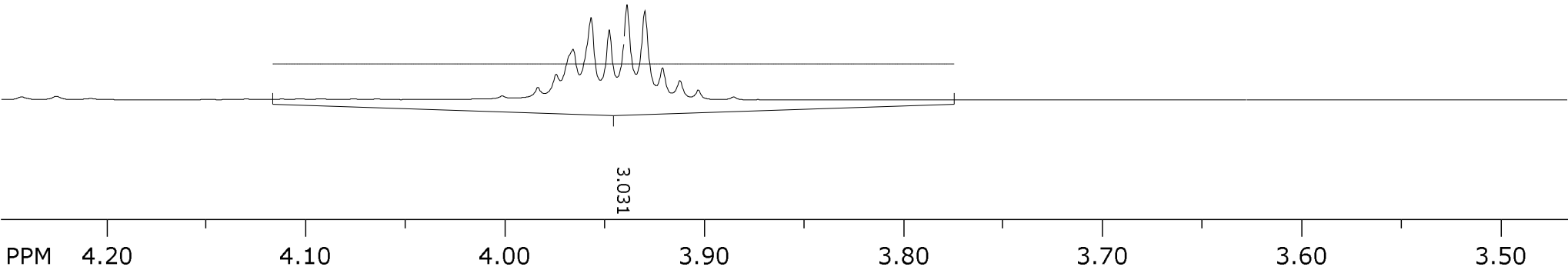
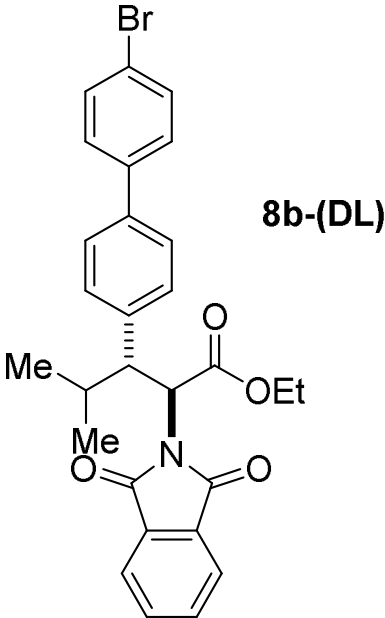


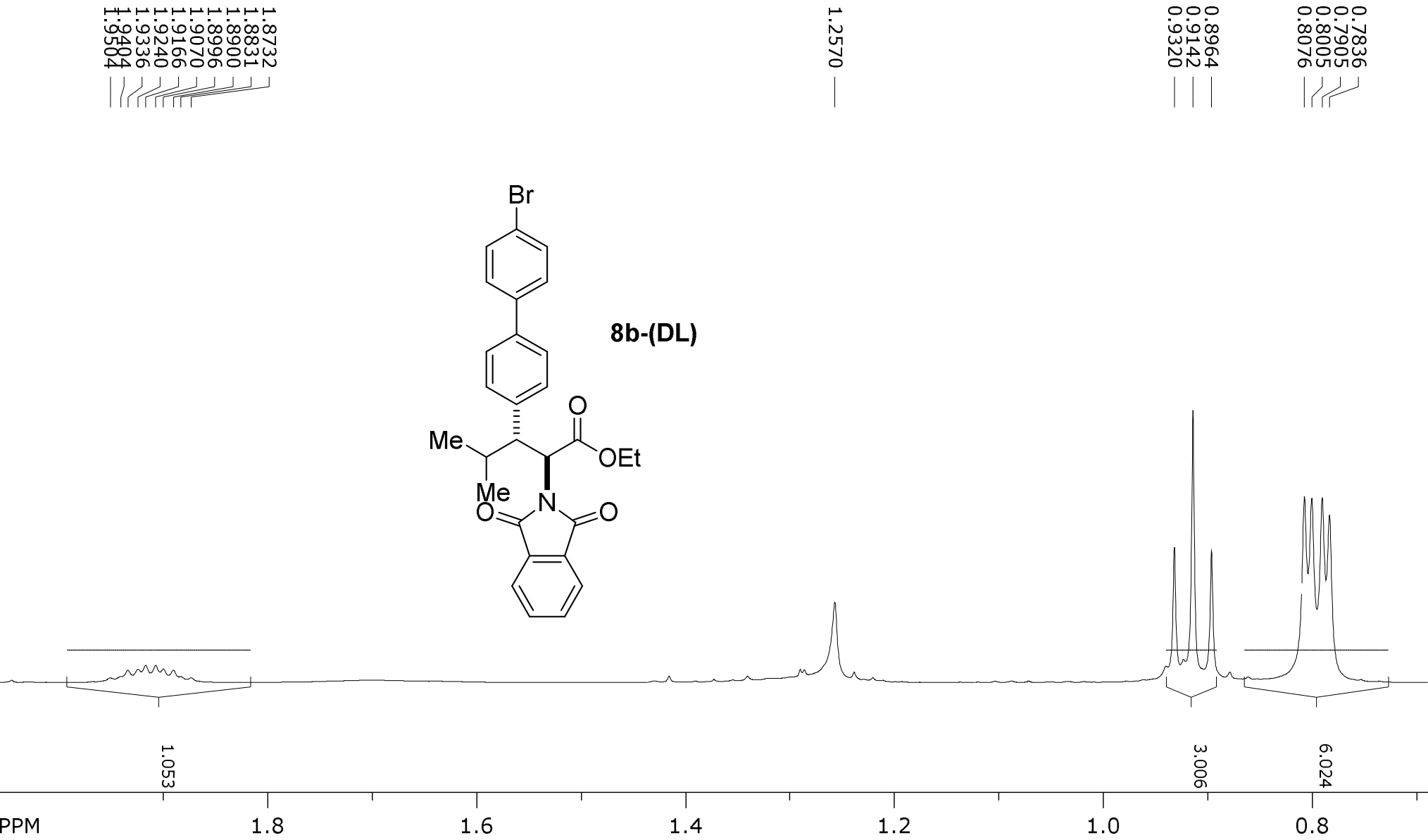


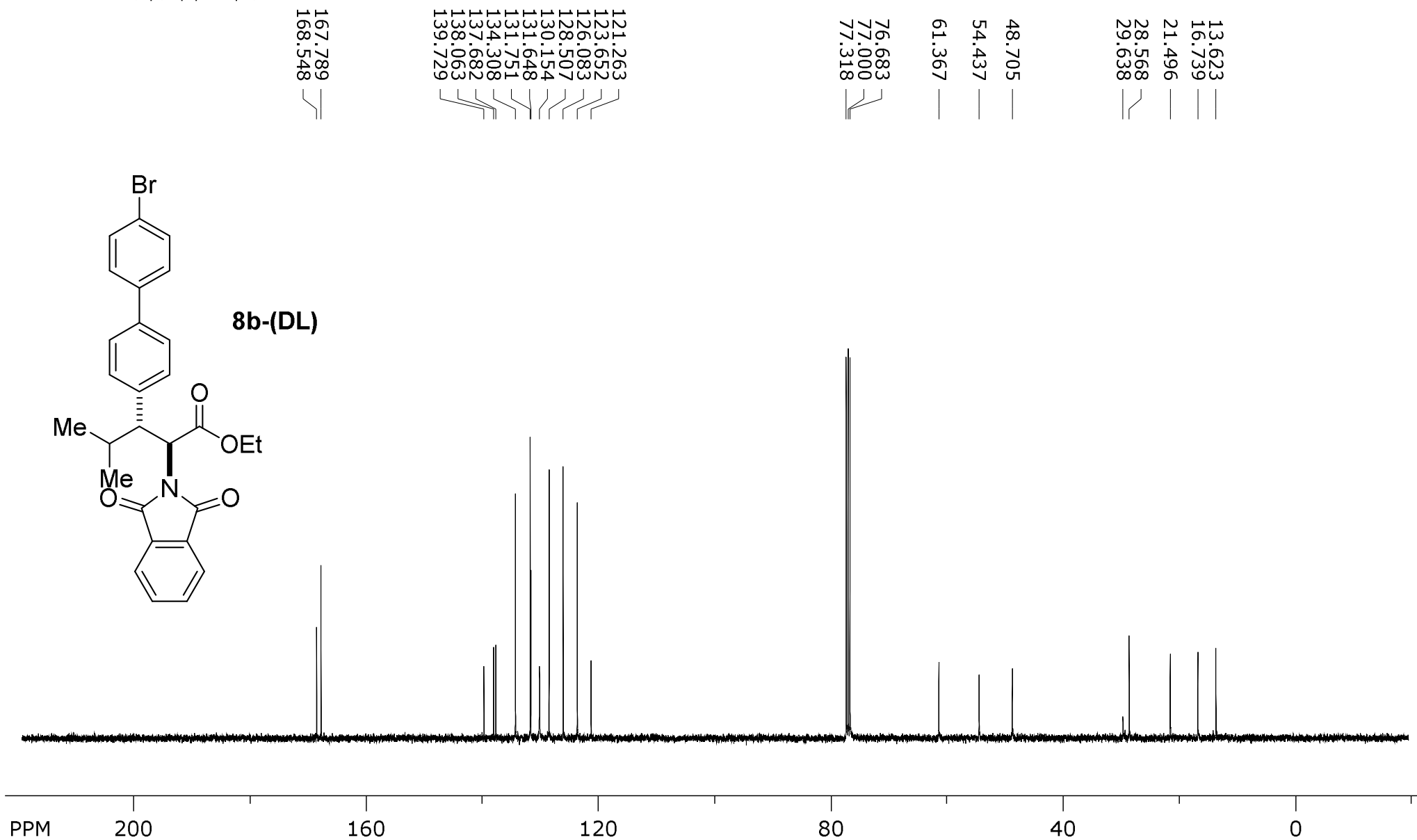


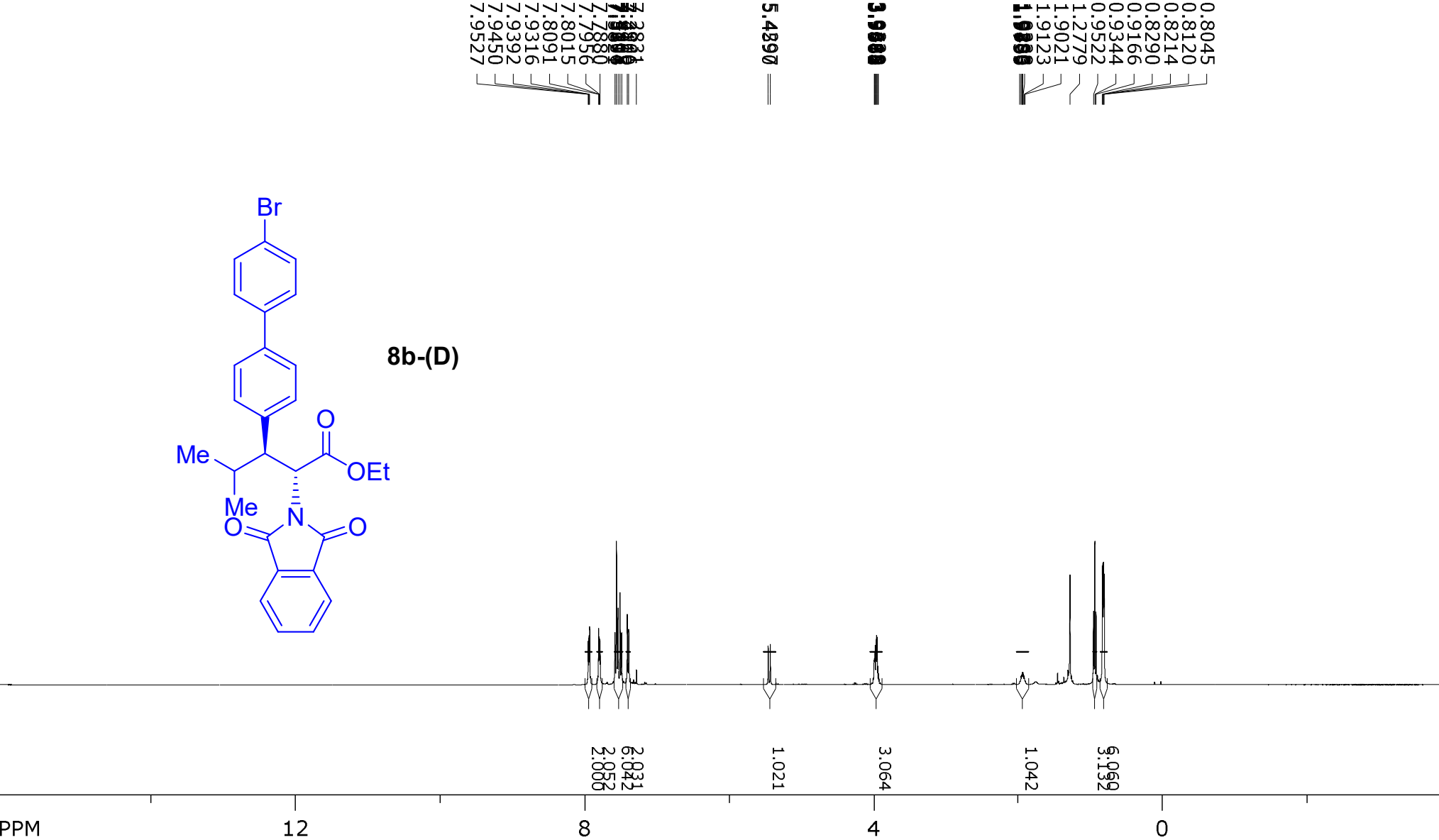


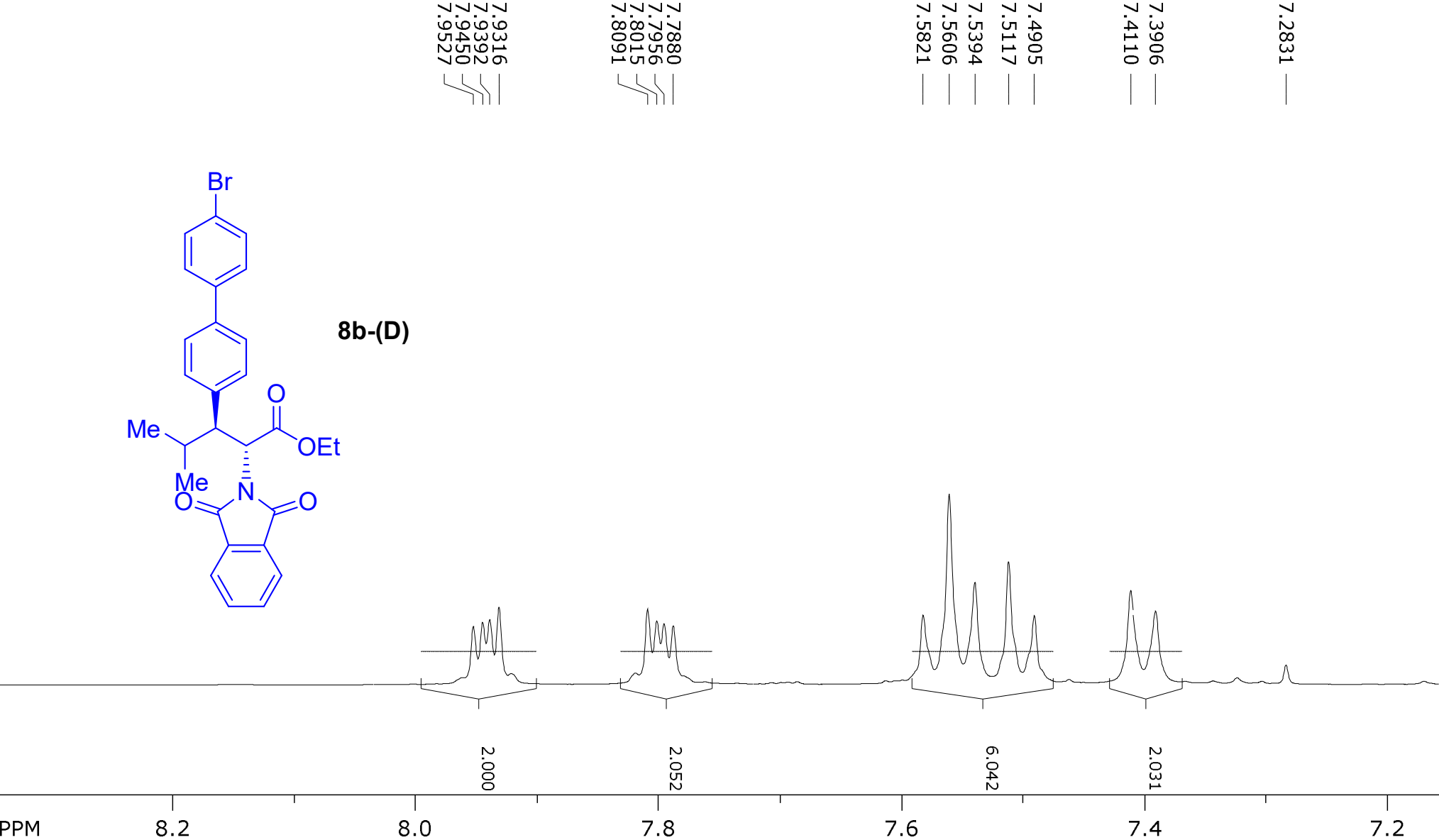
3.8841 —
3.9123 —
3.9210 —
3.9299 —
3.9389 —
3.9478 —
3.9569 —
3.9660 —
3.9745 —
3.9836 —
4.0013 —

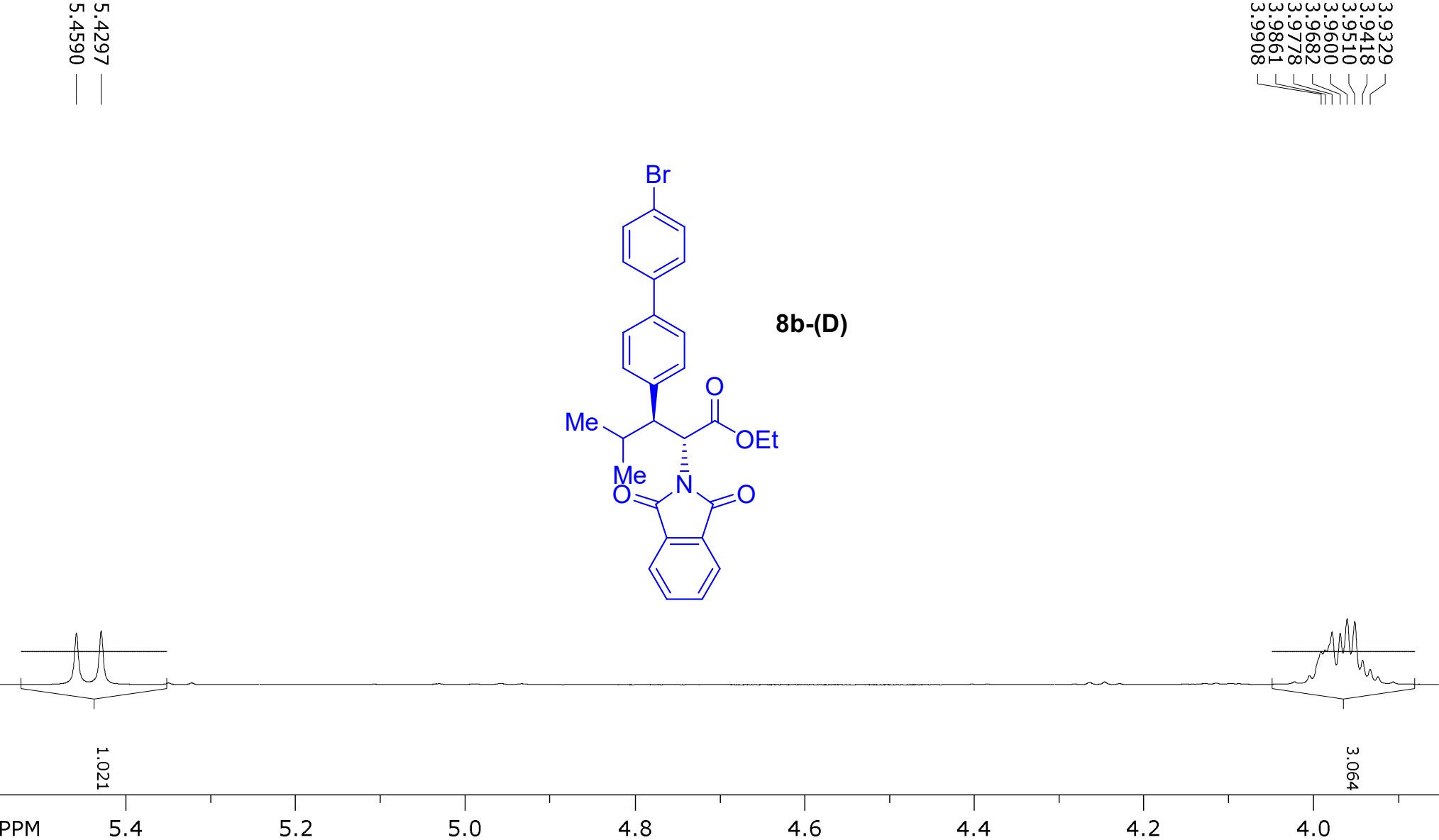










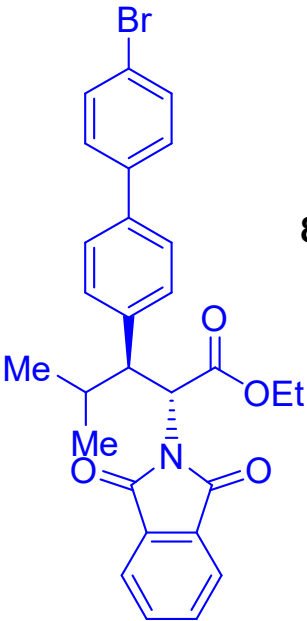


1.9021
1.9123
1.9238
1.9293
1.9389
1.9460
1.9566
1.9735

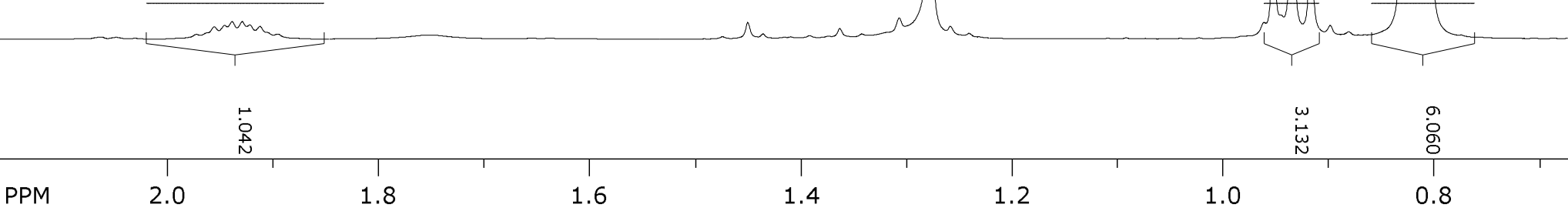
1.2779

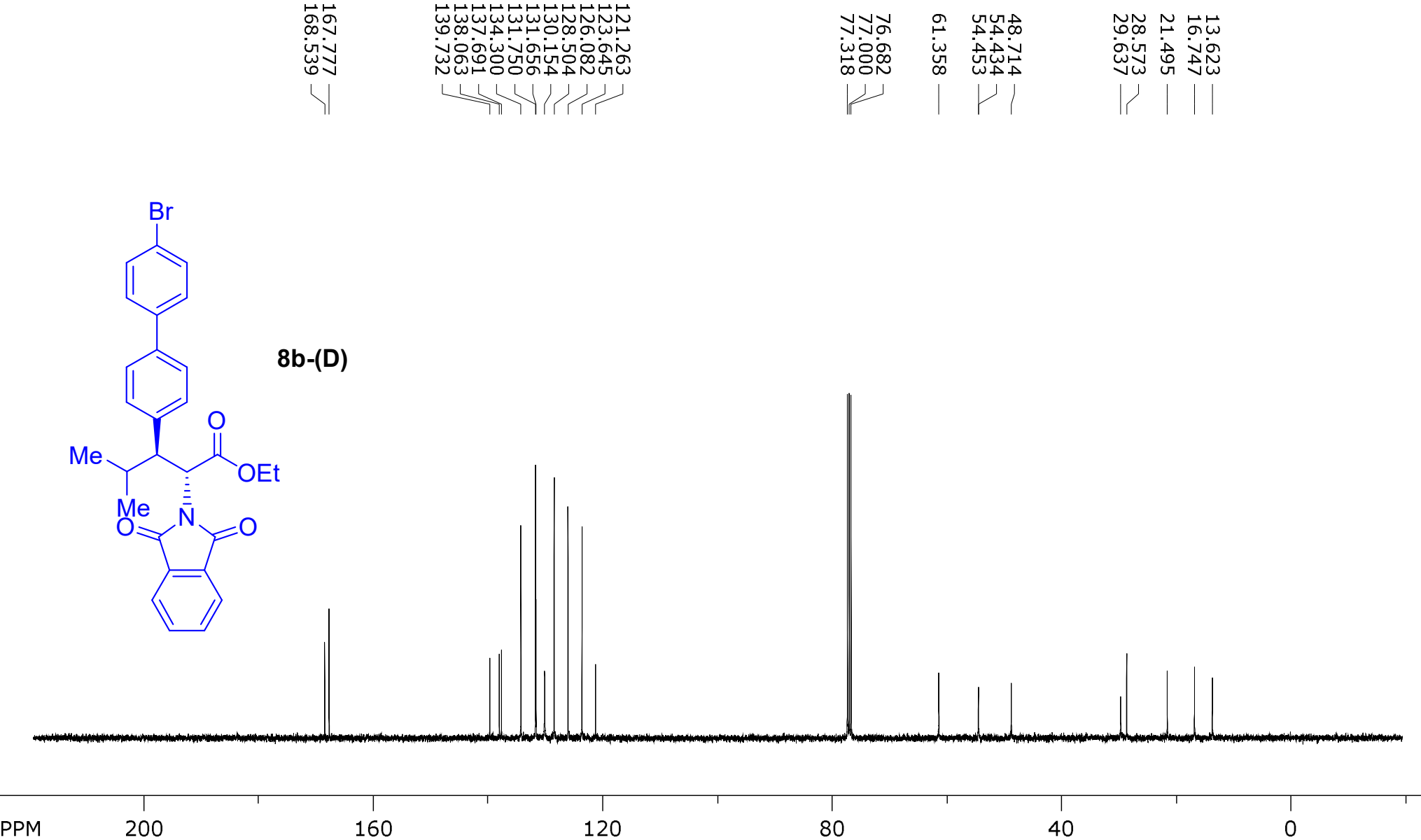
0.9166
0.9344
0.9522

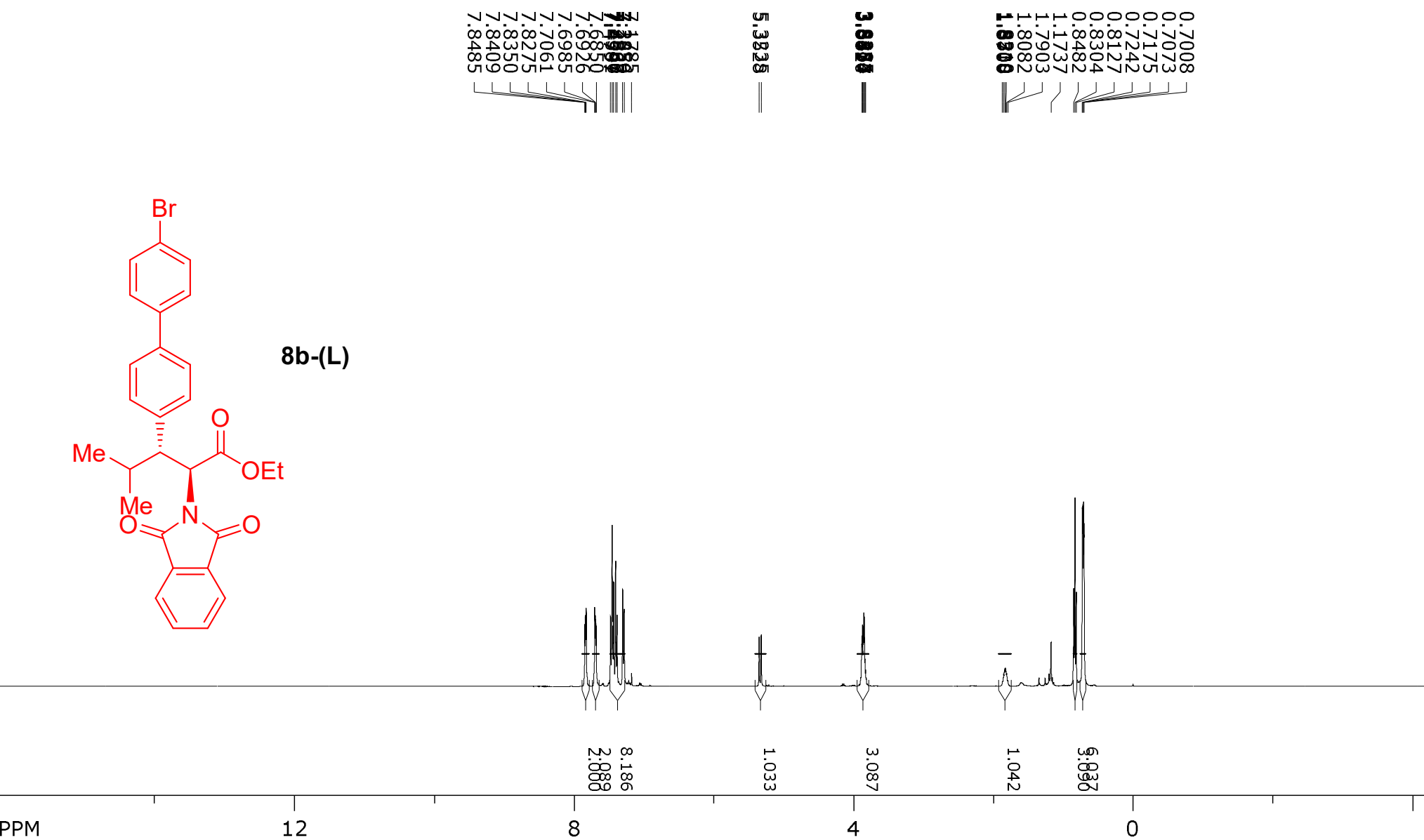
0.8045
0.8120
0.8214
0.8290

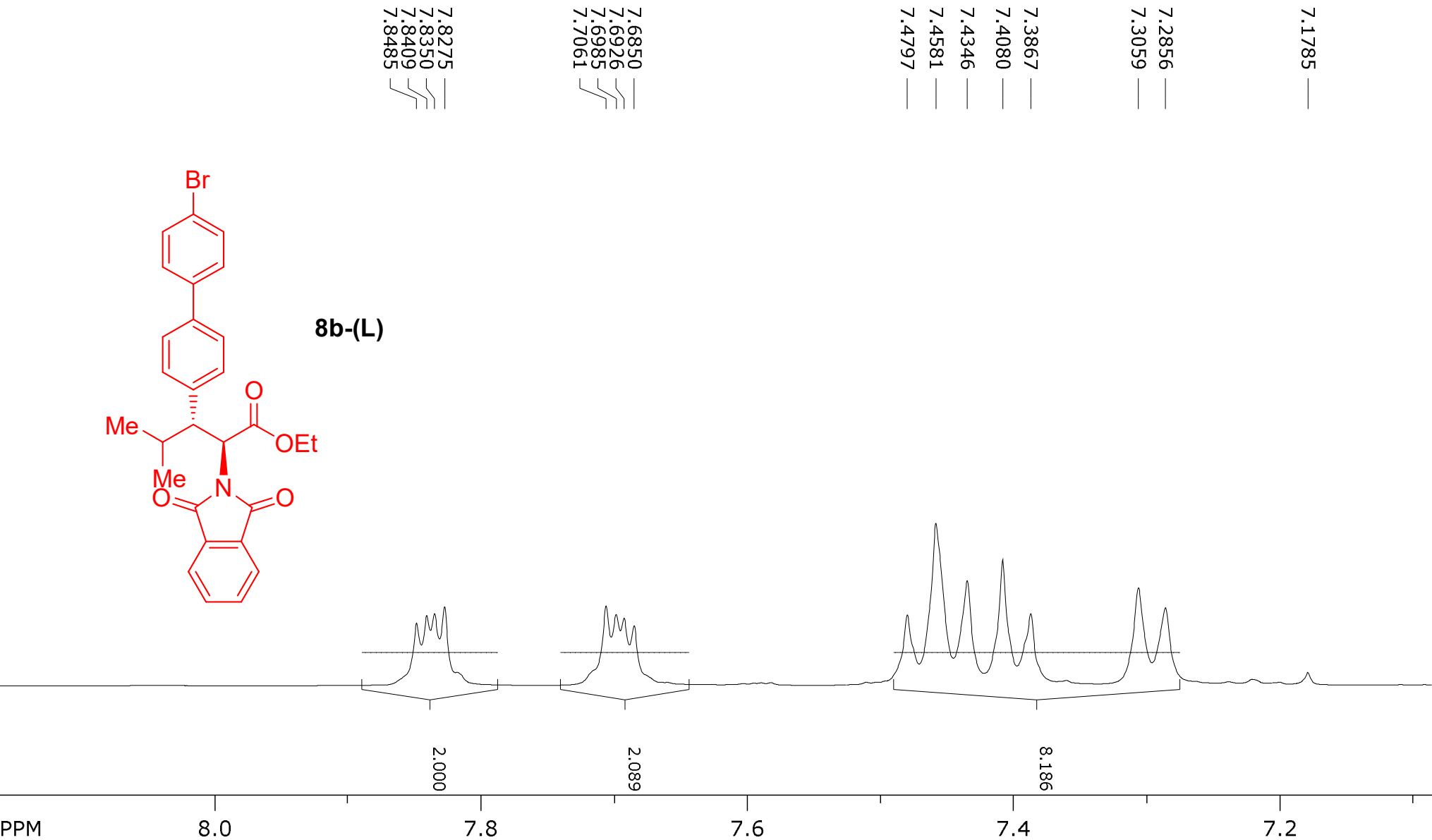


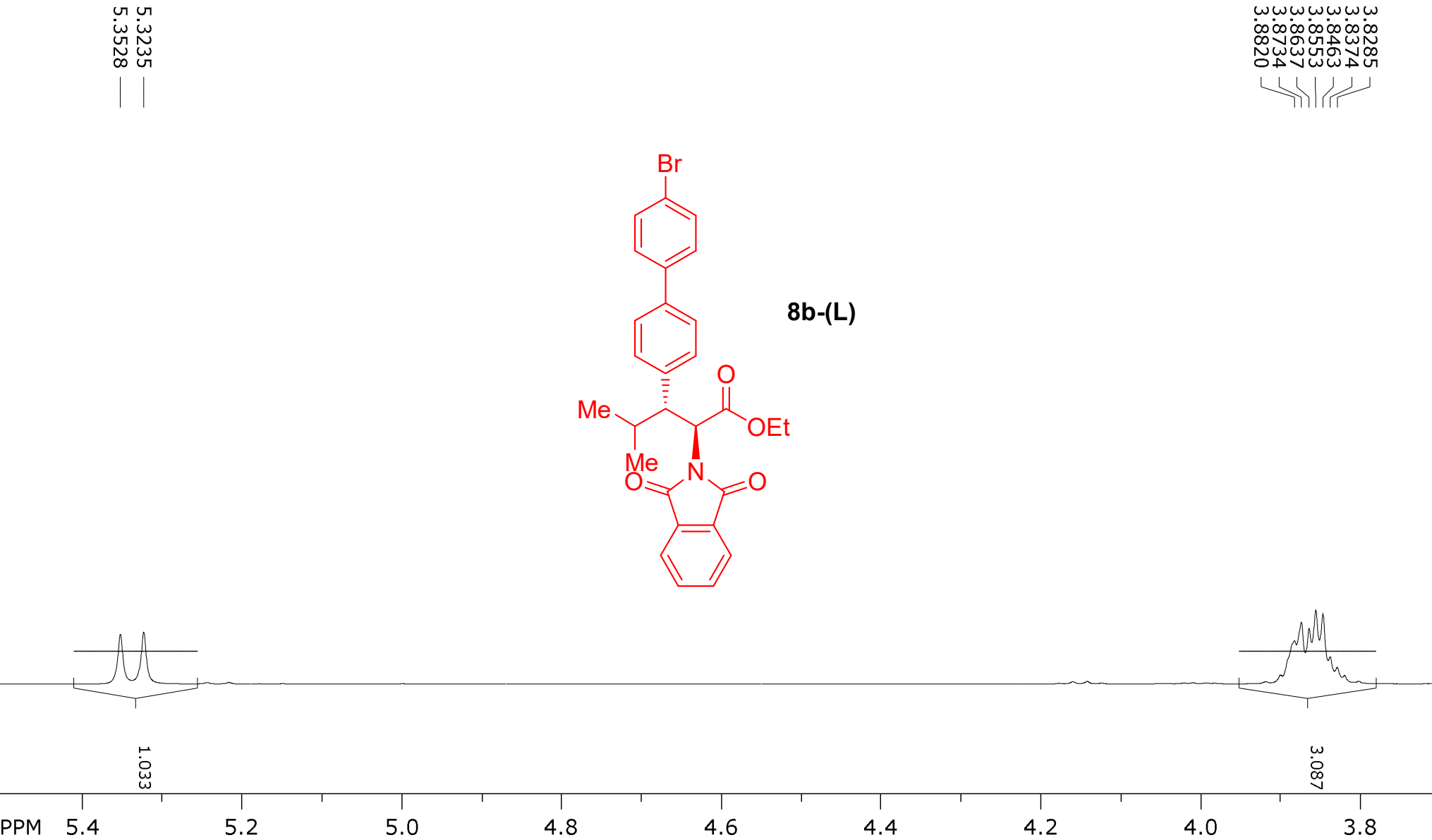
8b-(D)

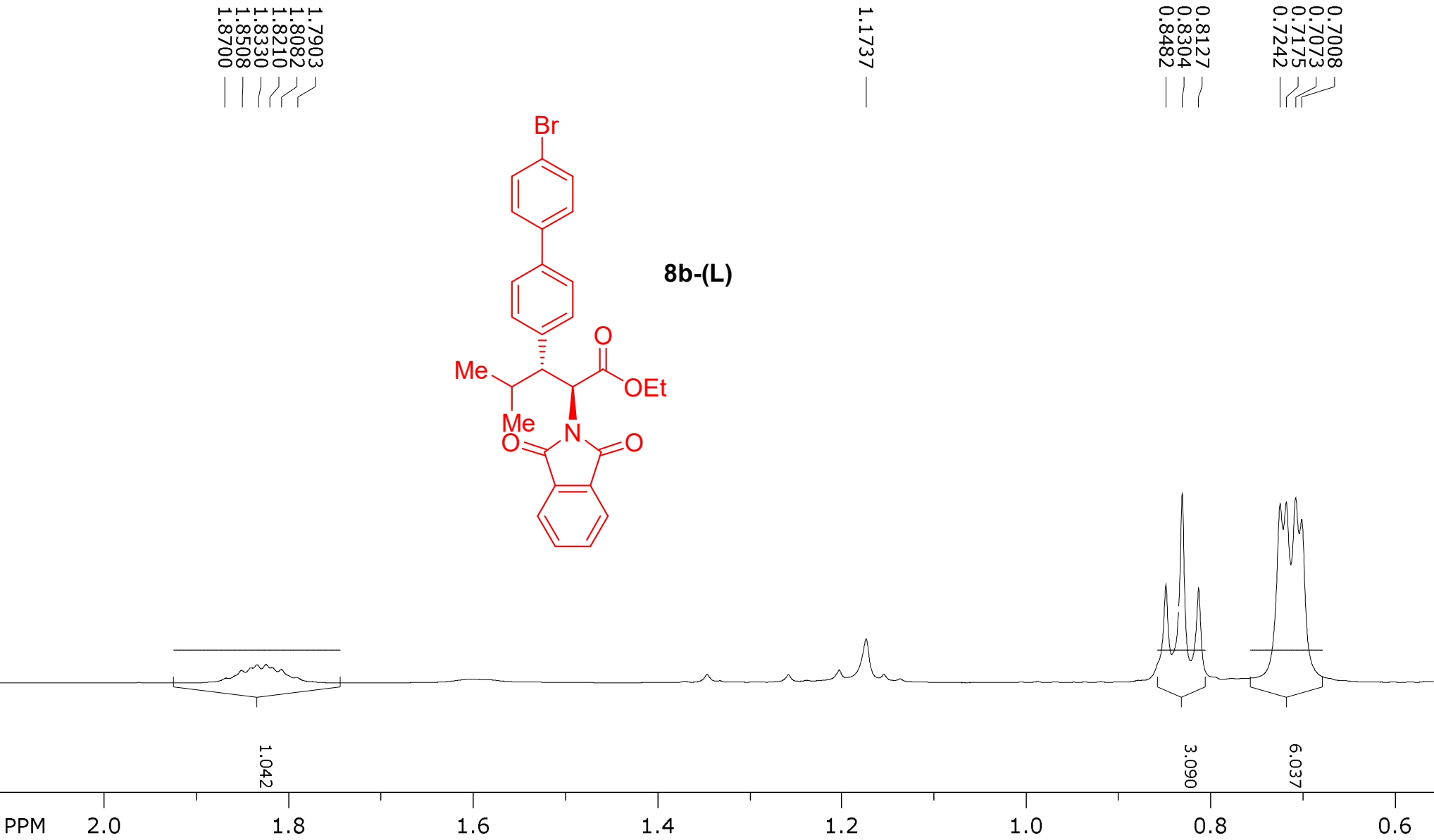


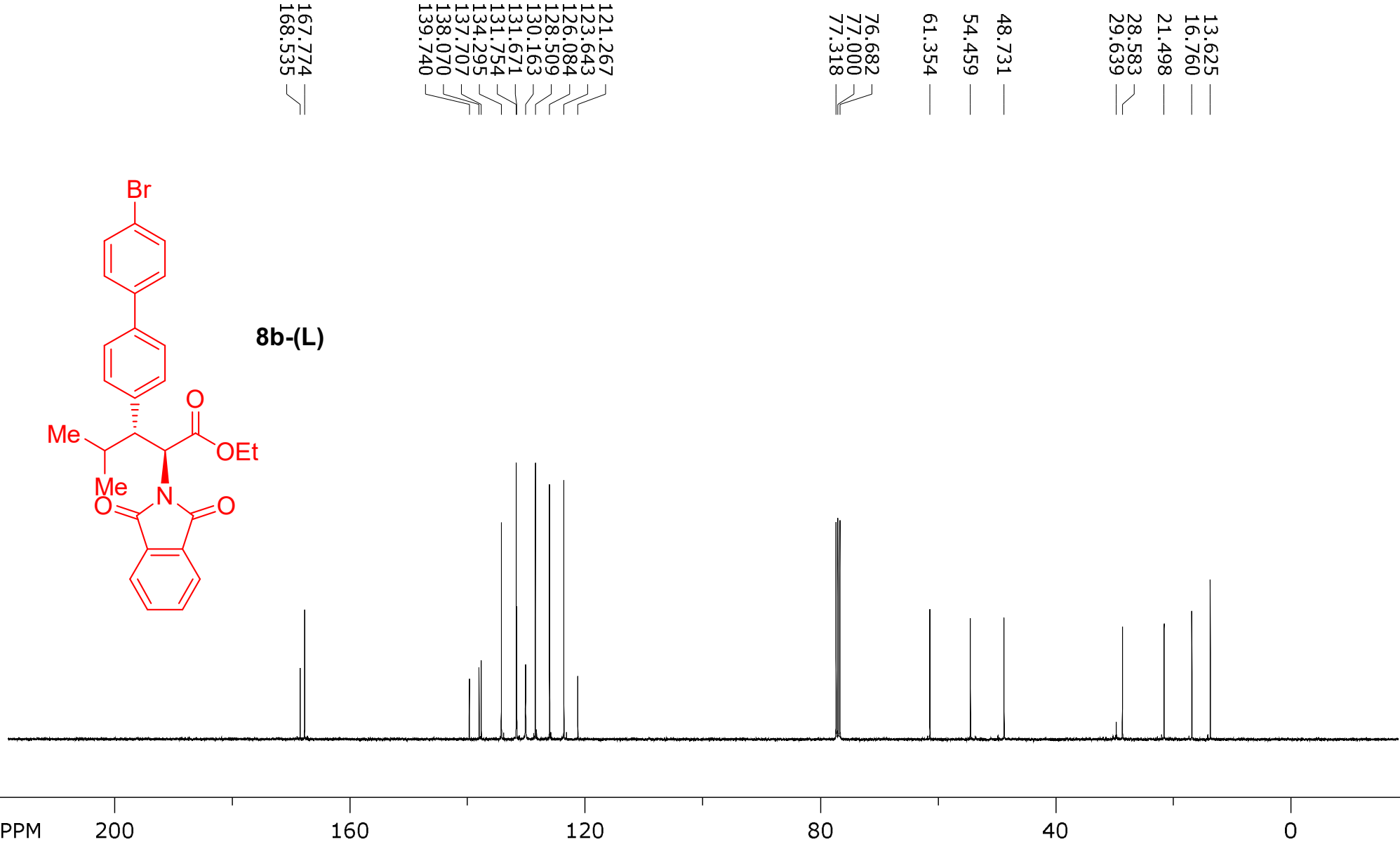


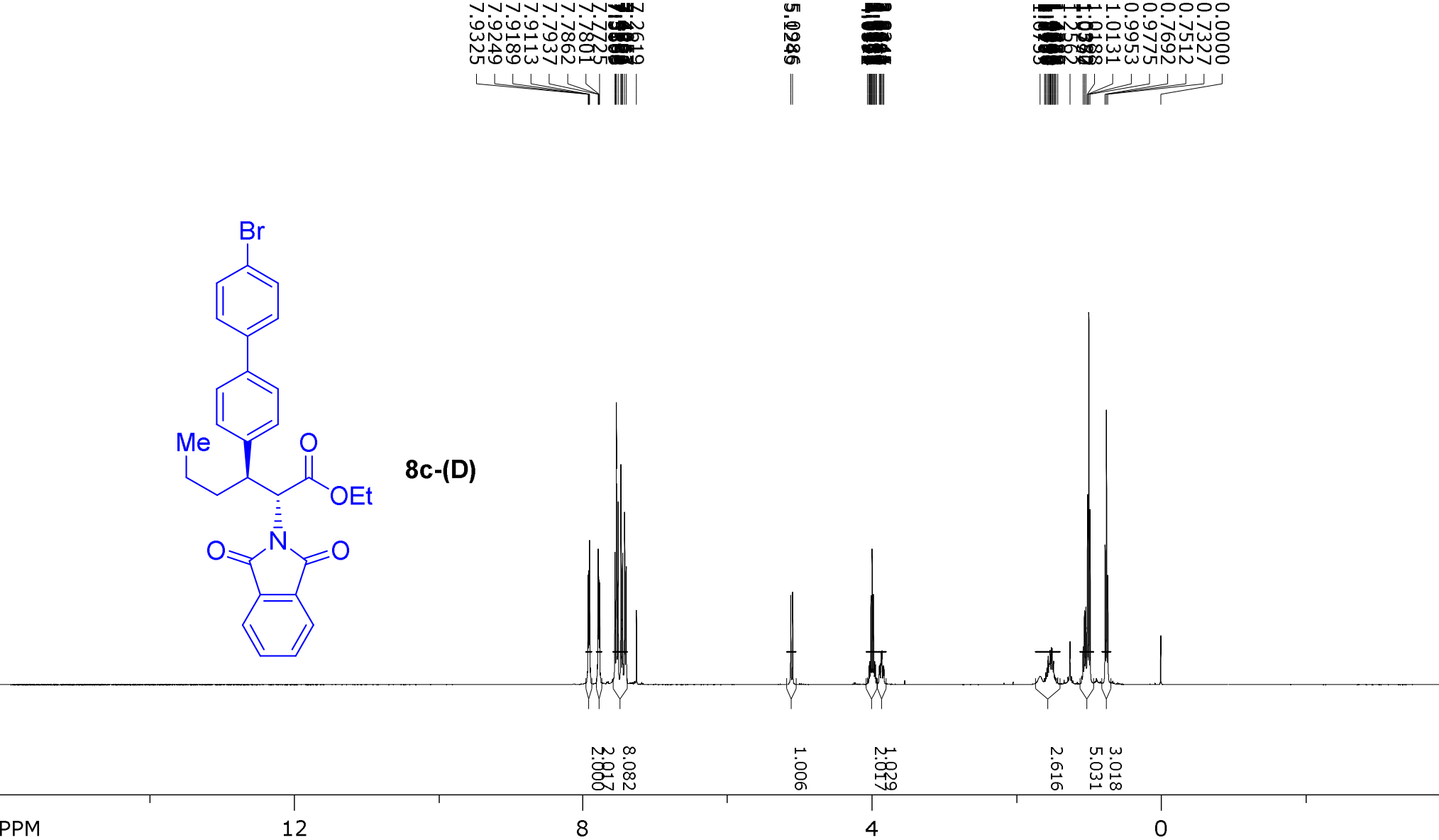


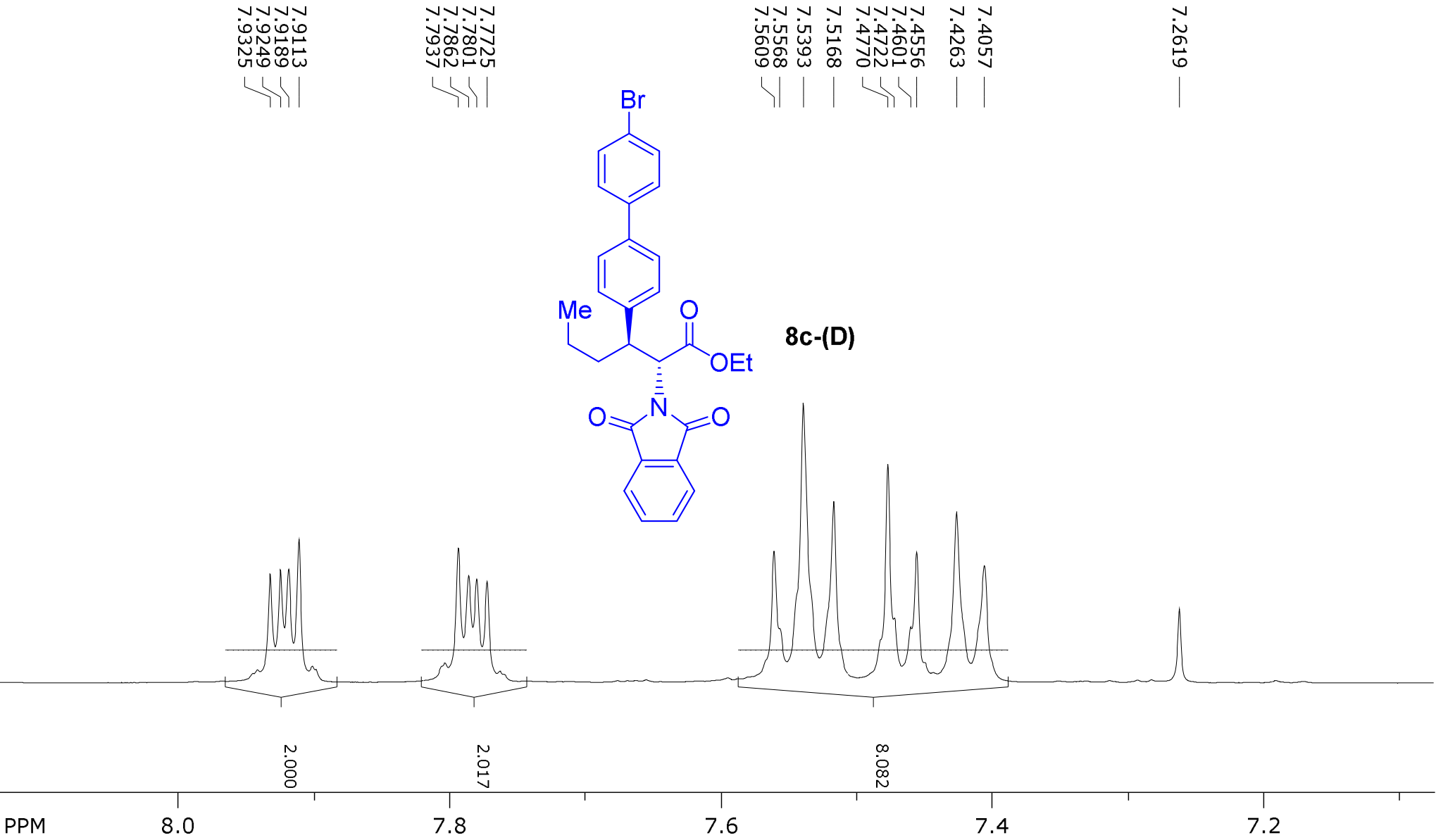


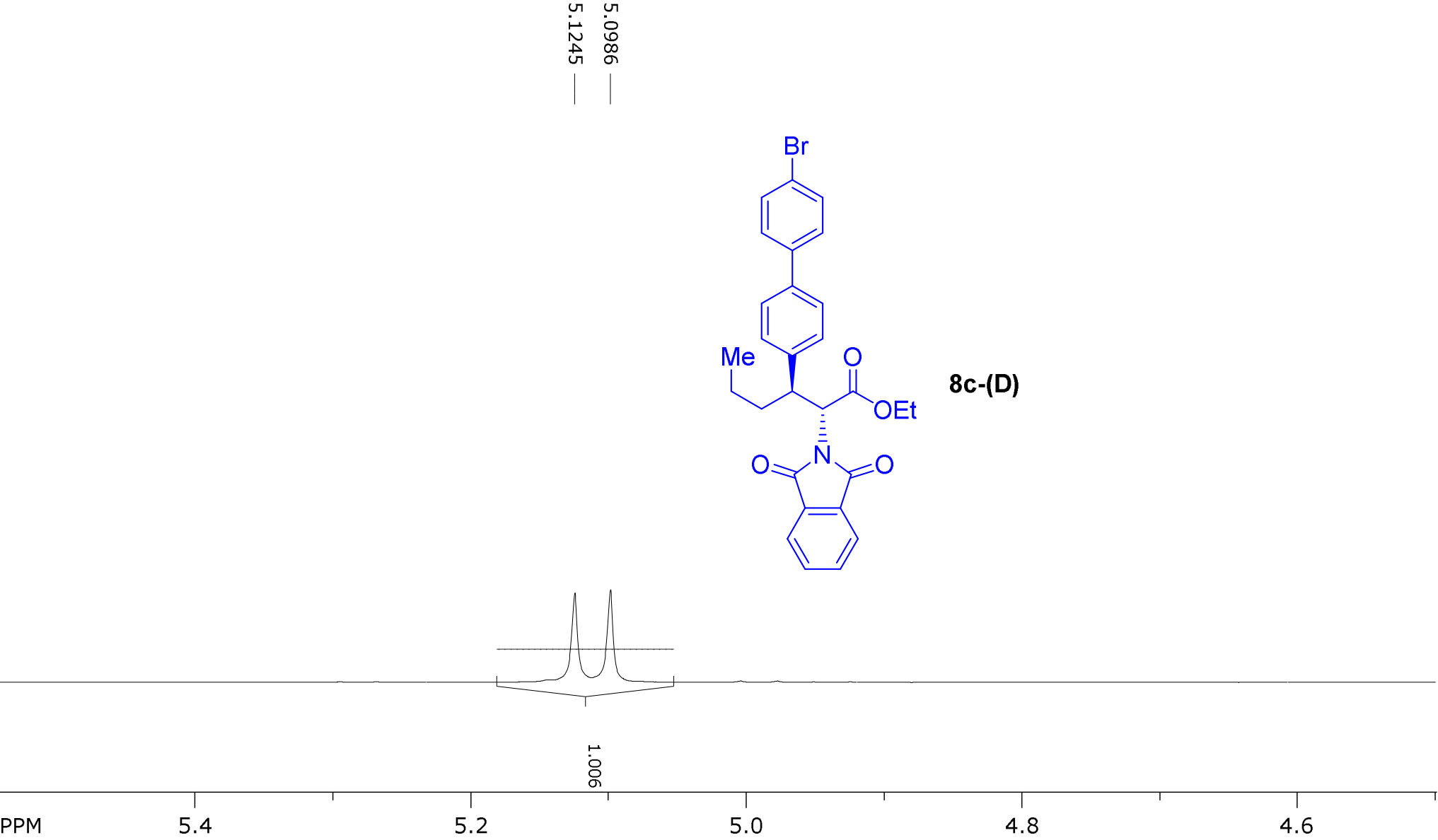


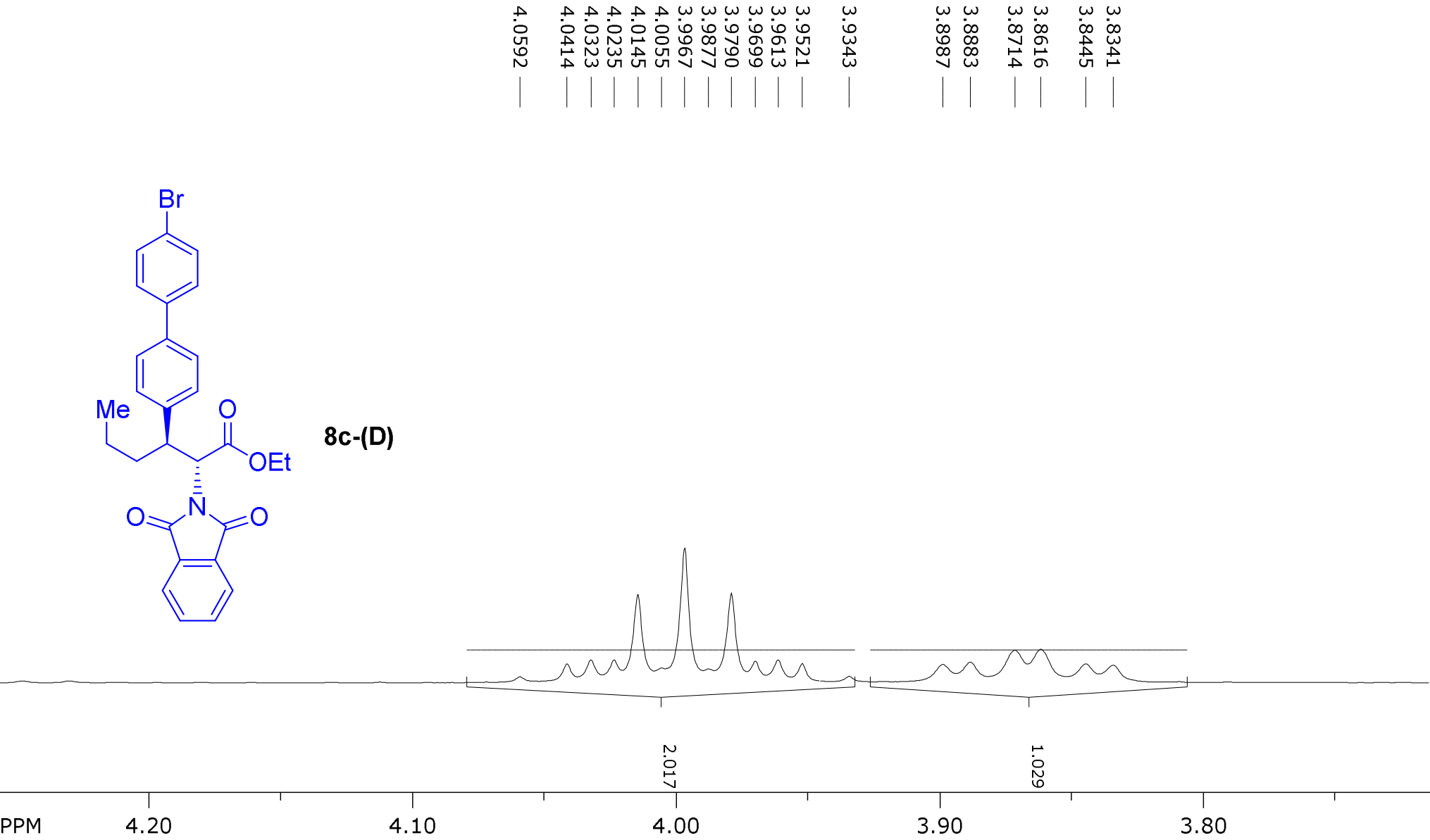


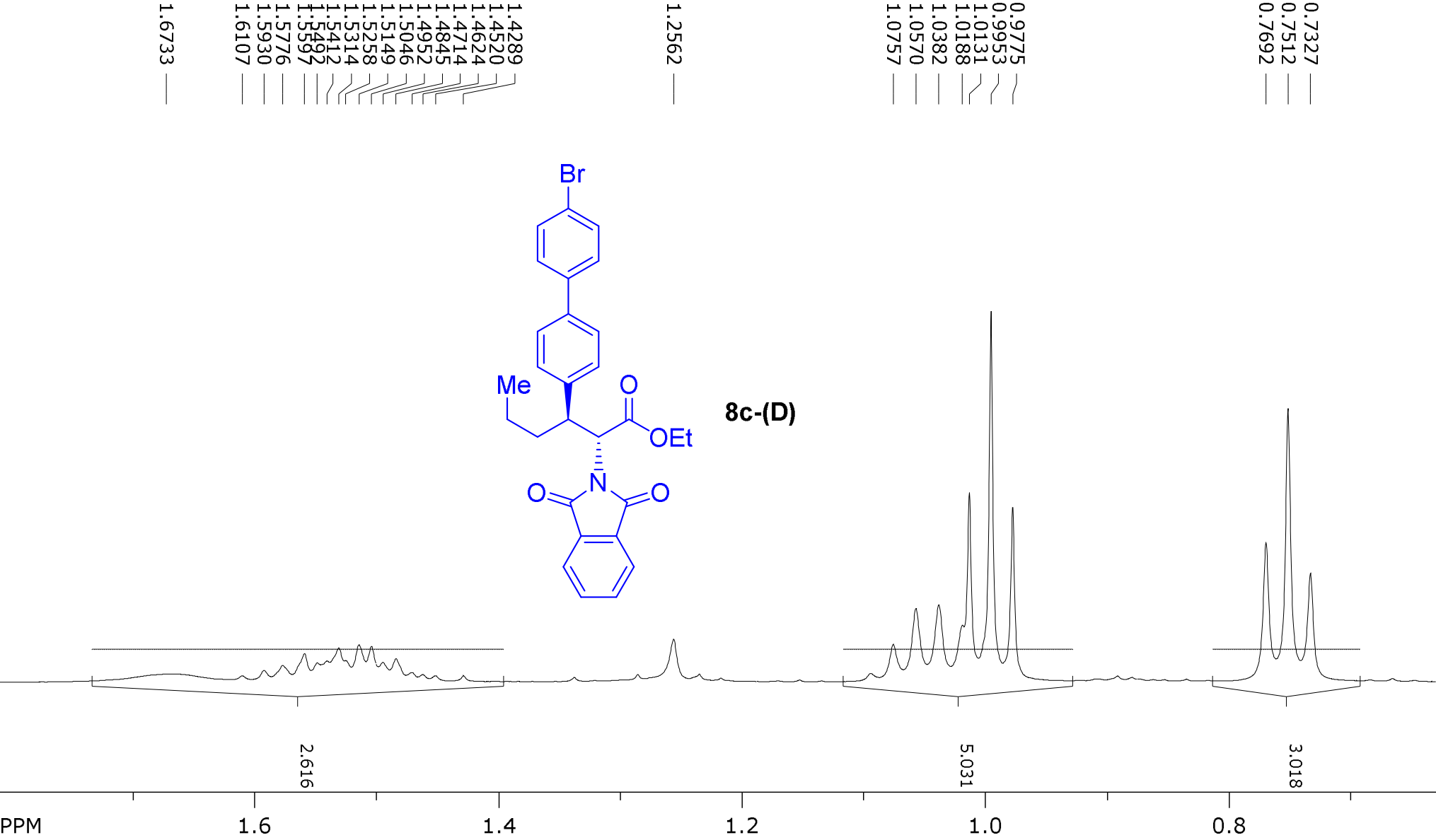


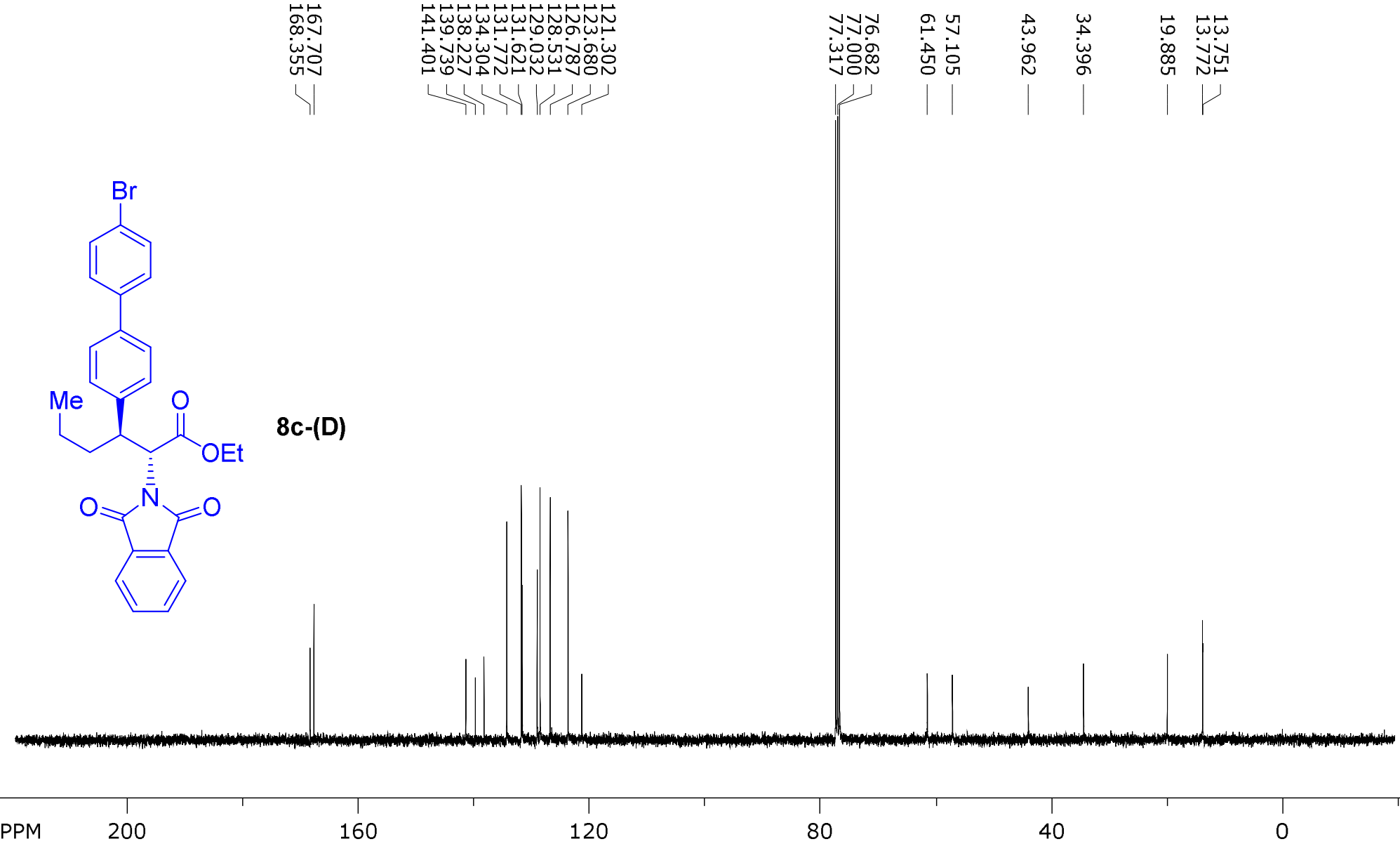


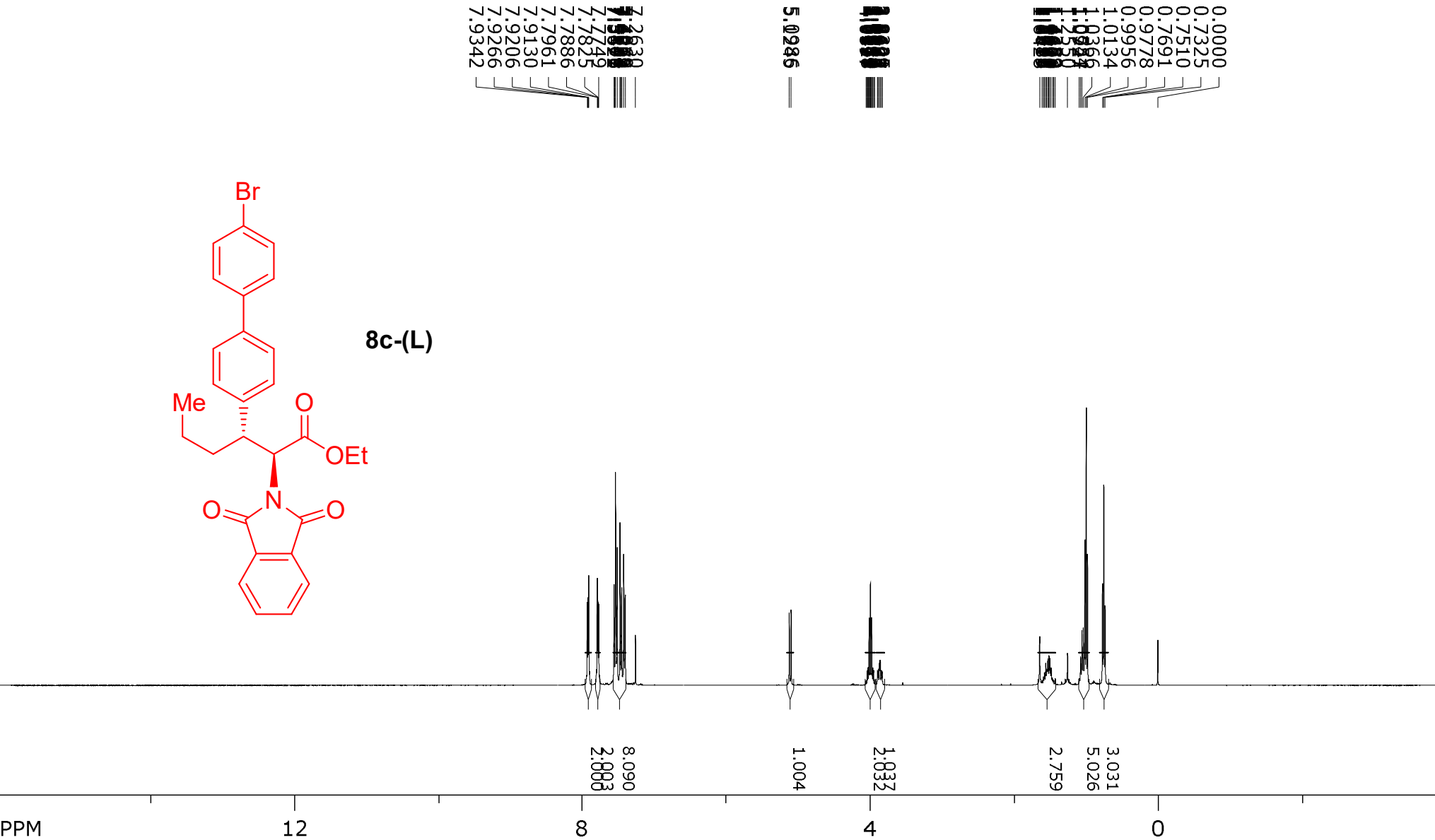


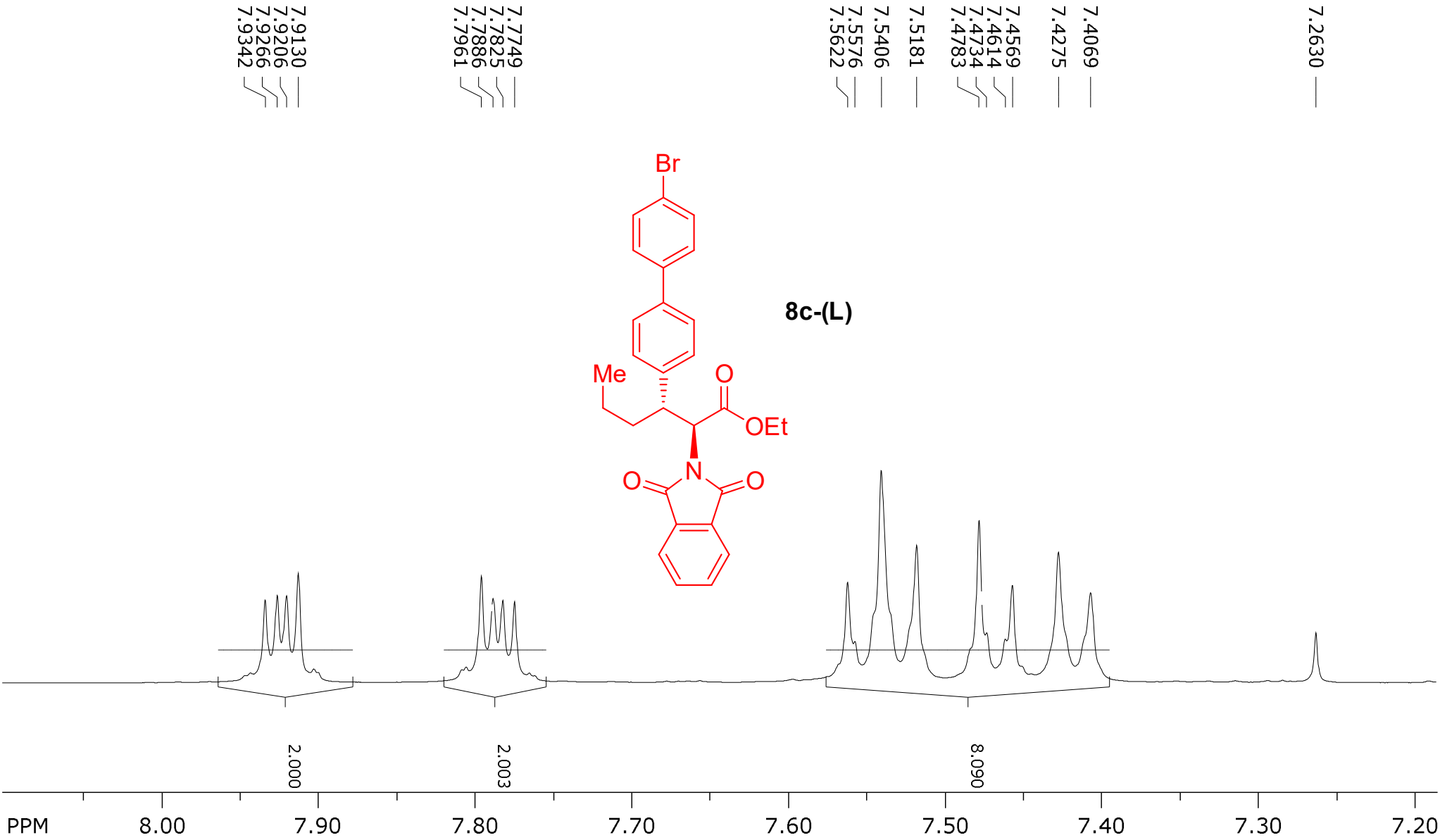


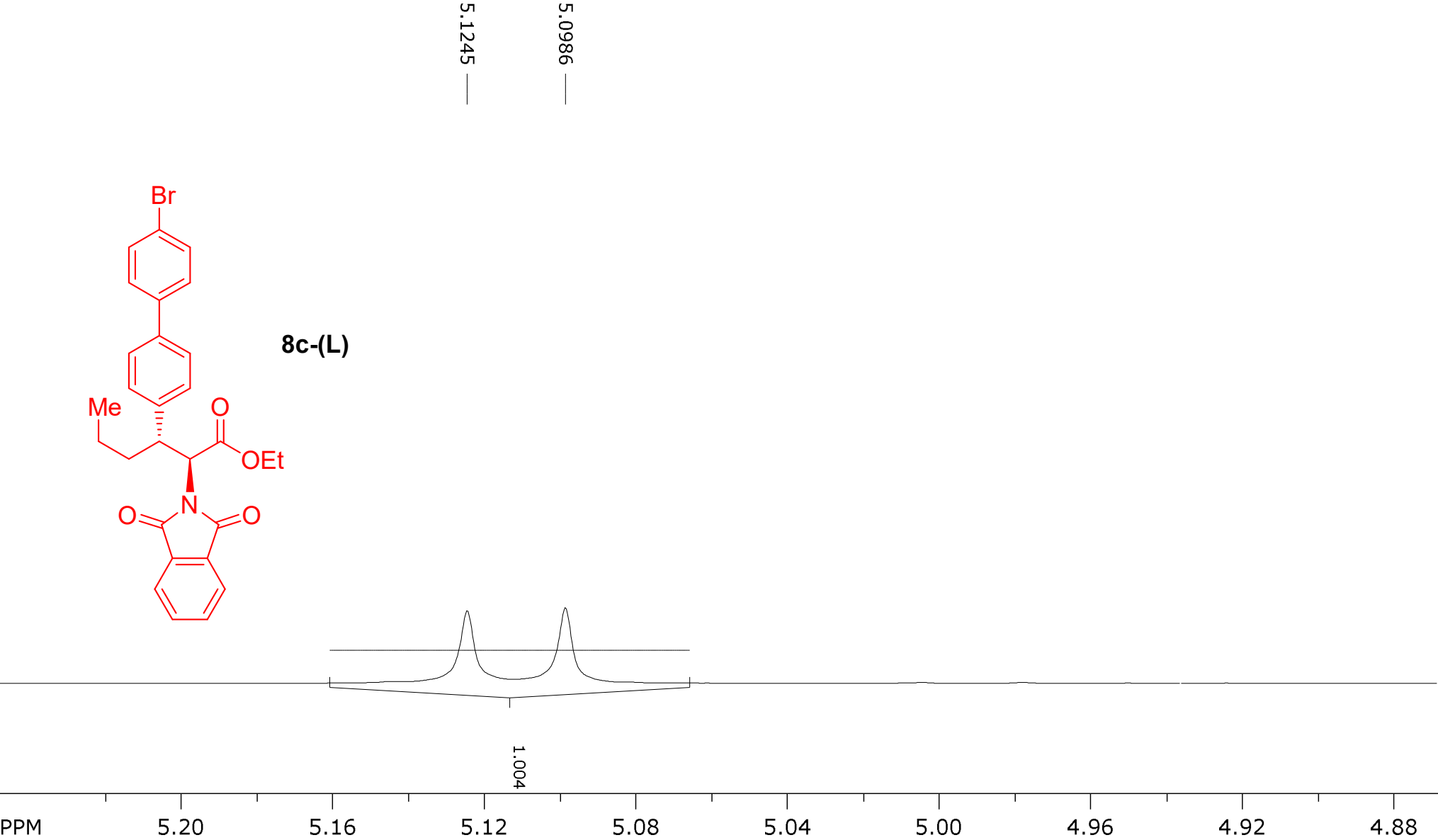


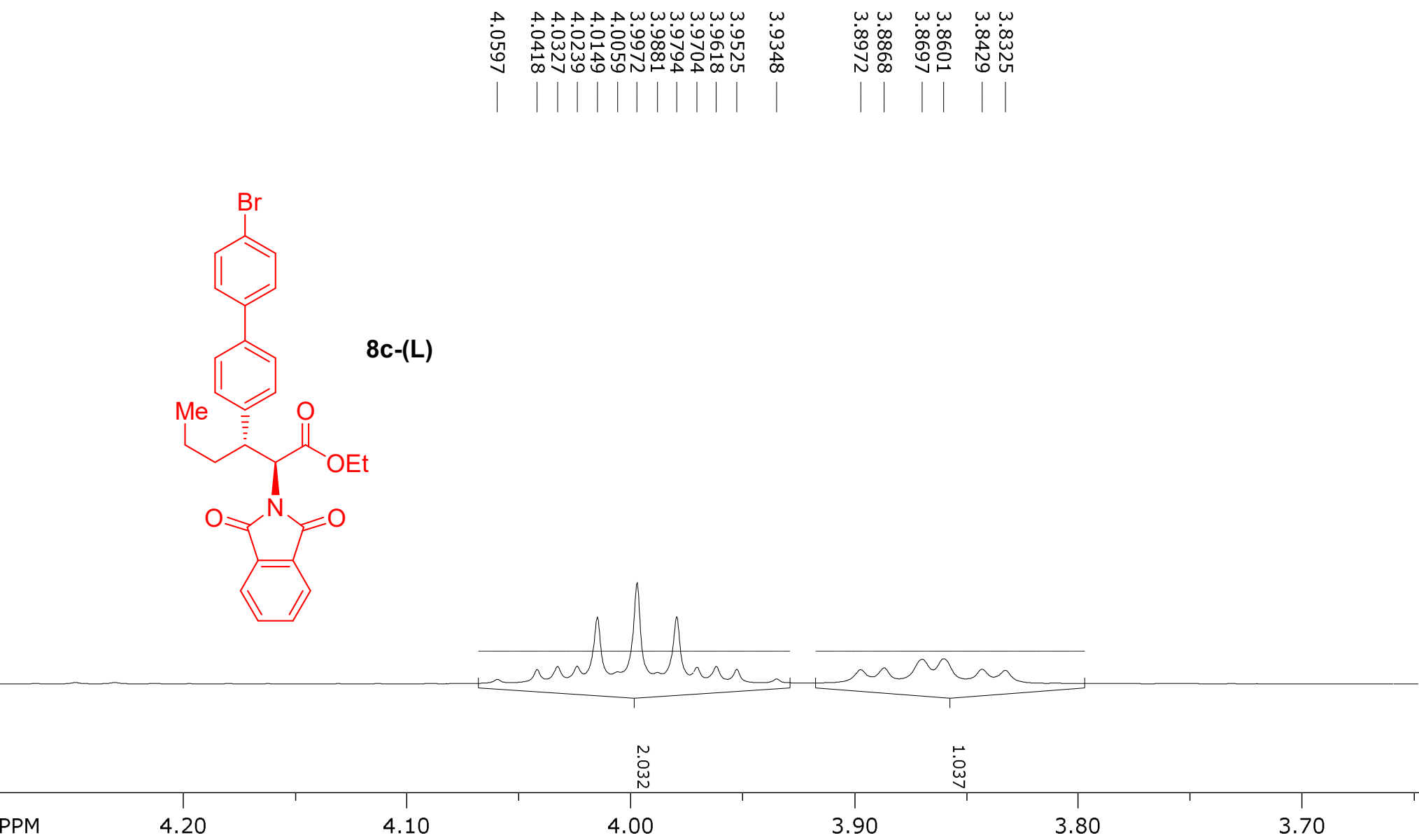










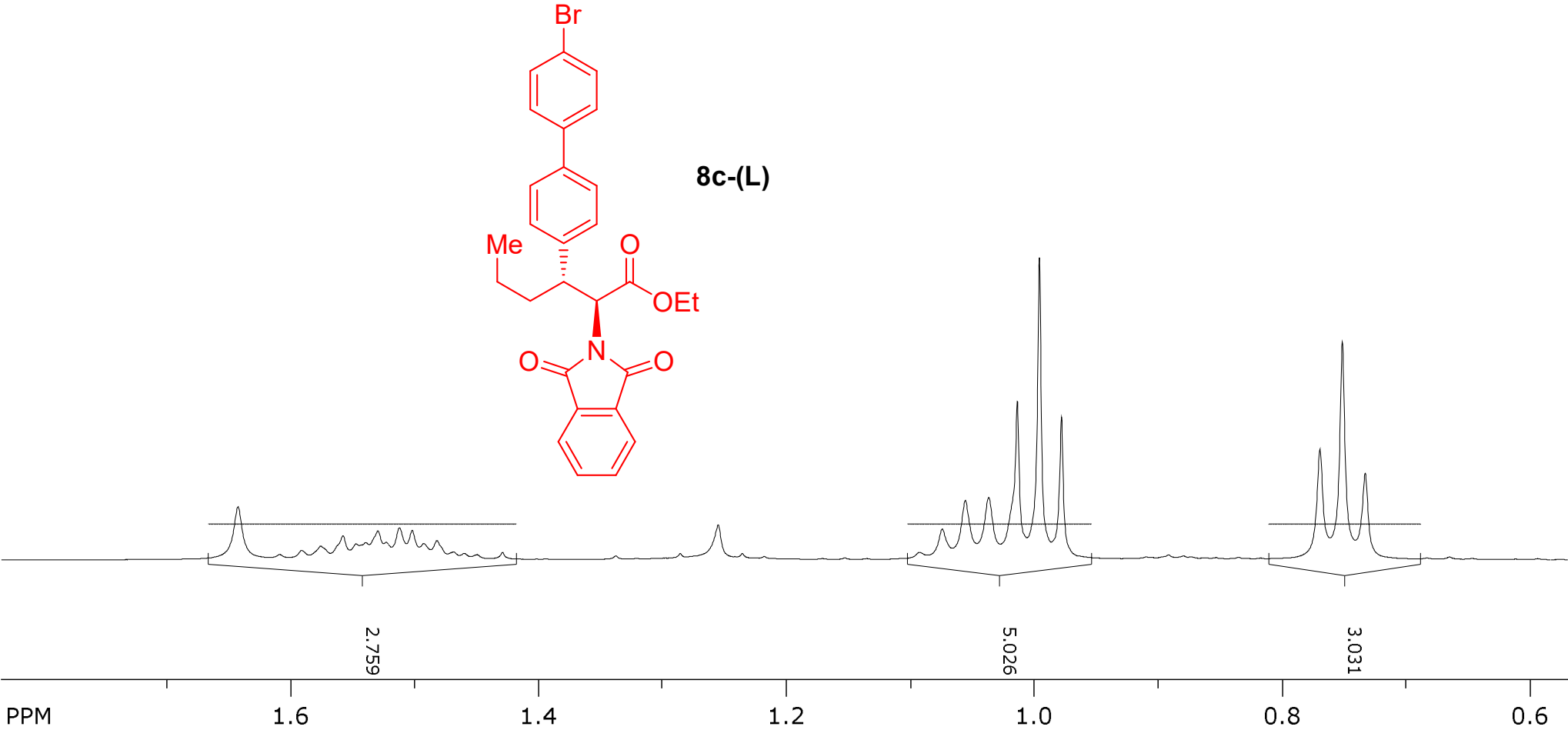


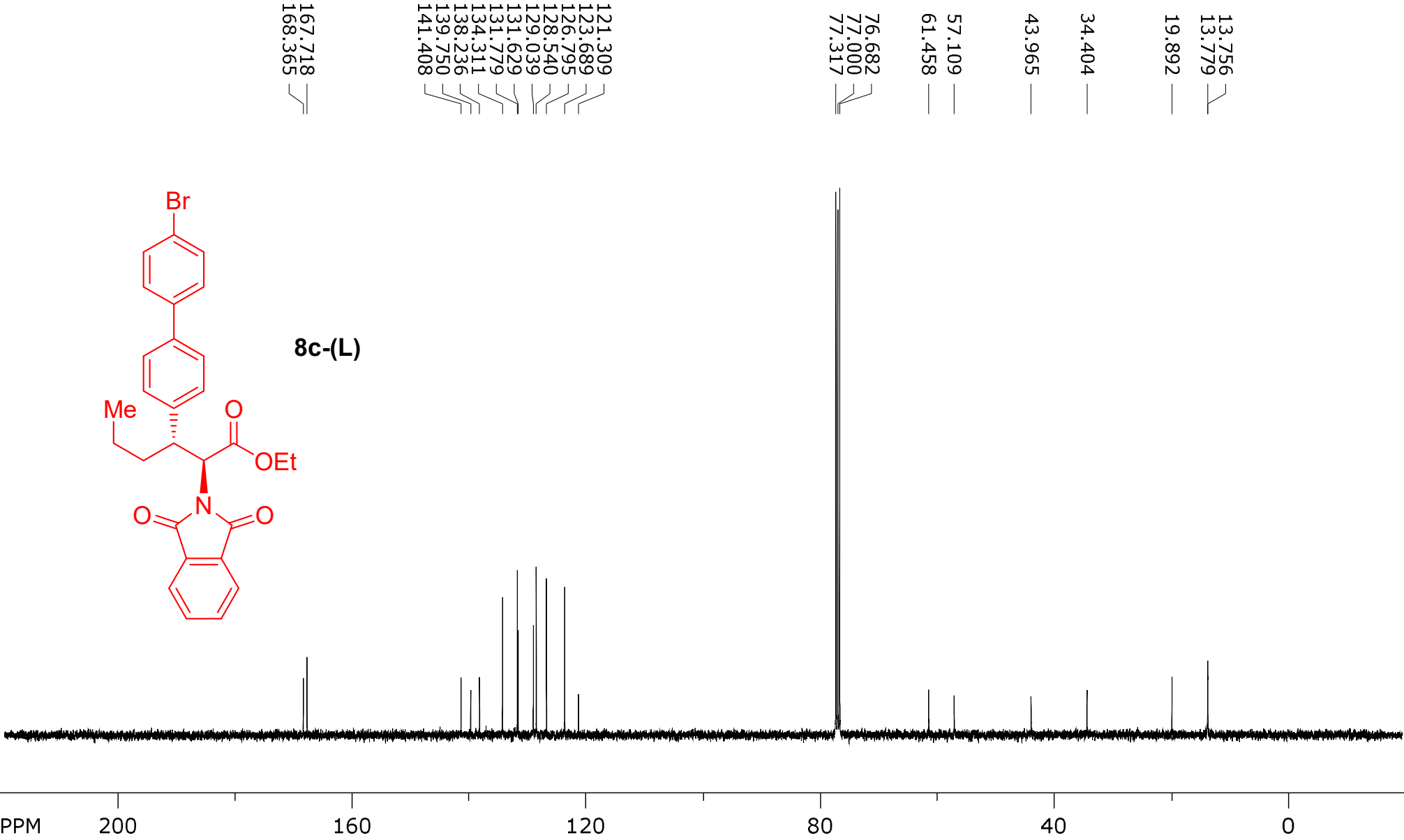
1.4289 —
1.4472 —
1.4602 —
1.4826 —
1.5021 —
1.5125 —
1.5297 —
1.5469 —
1.5577 —
1.5752 —
1.5918 —
1.6089 —
1.6428 —

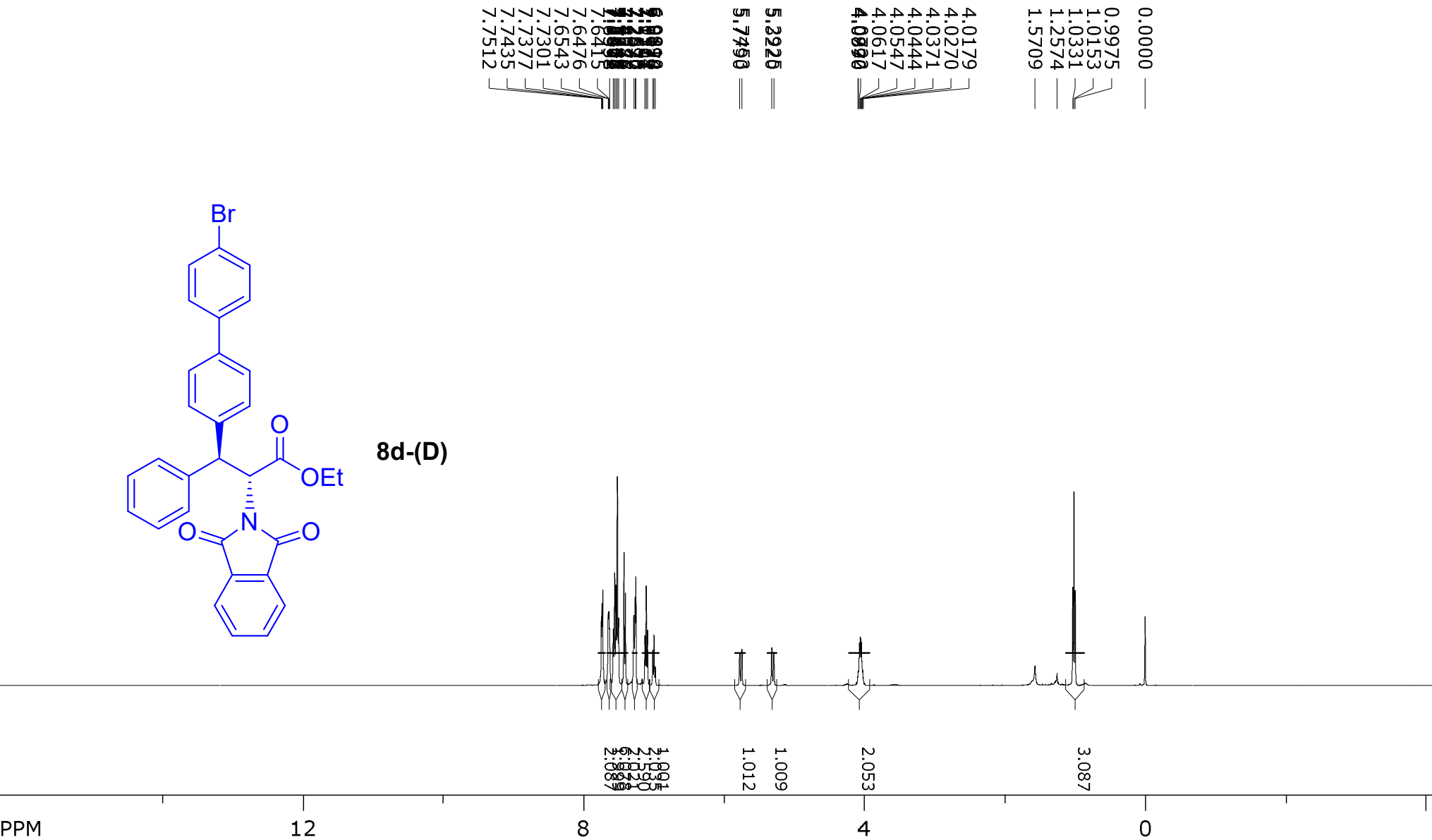
1.2550 —

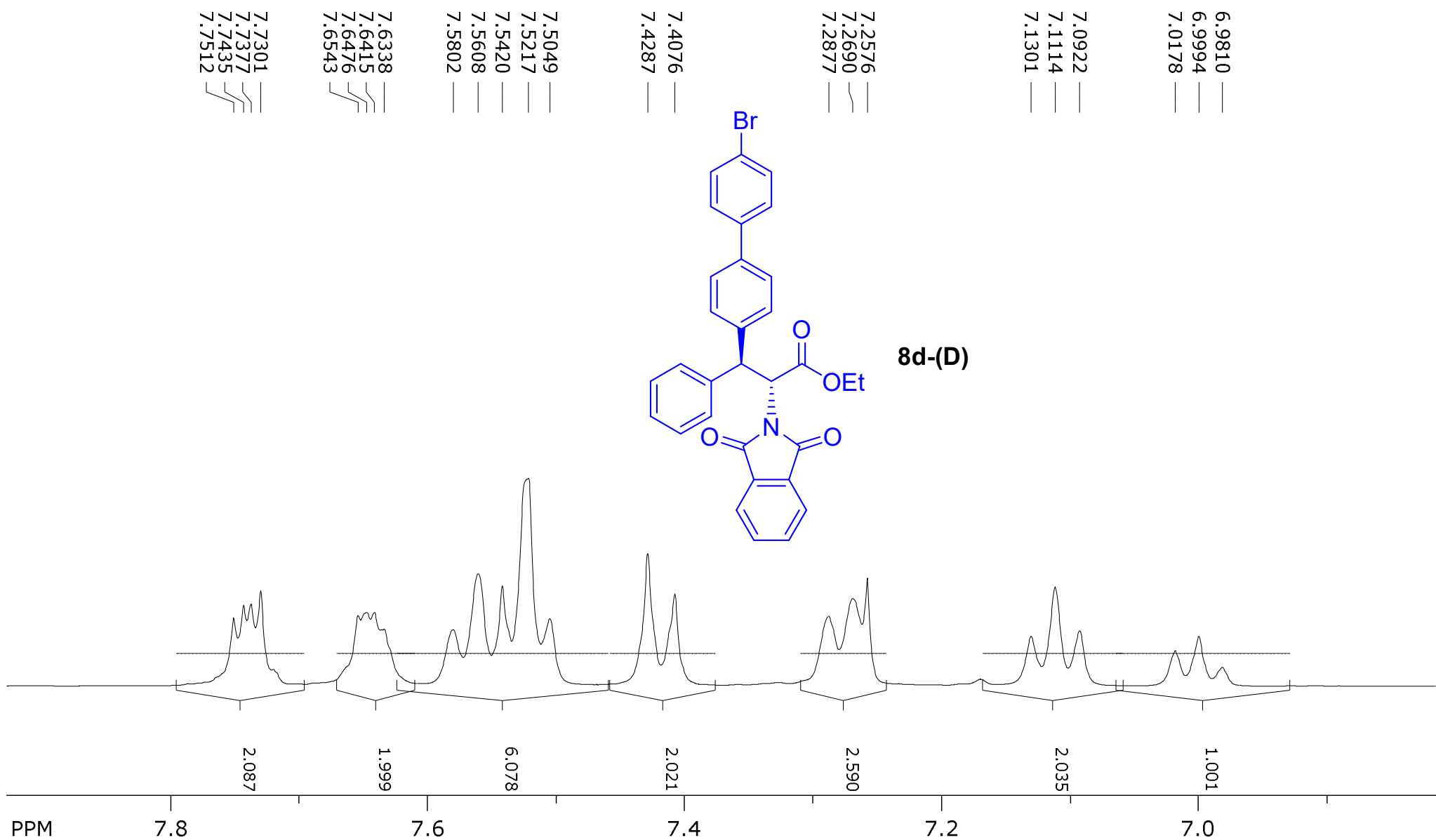
0.9778 —
0.9956 —
1.0134 —
1.0366 —
1.0554 —
1.0741 —
1.0927 —

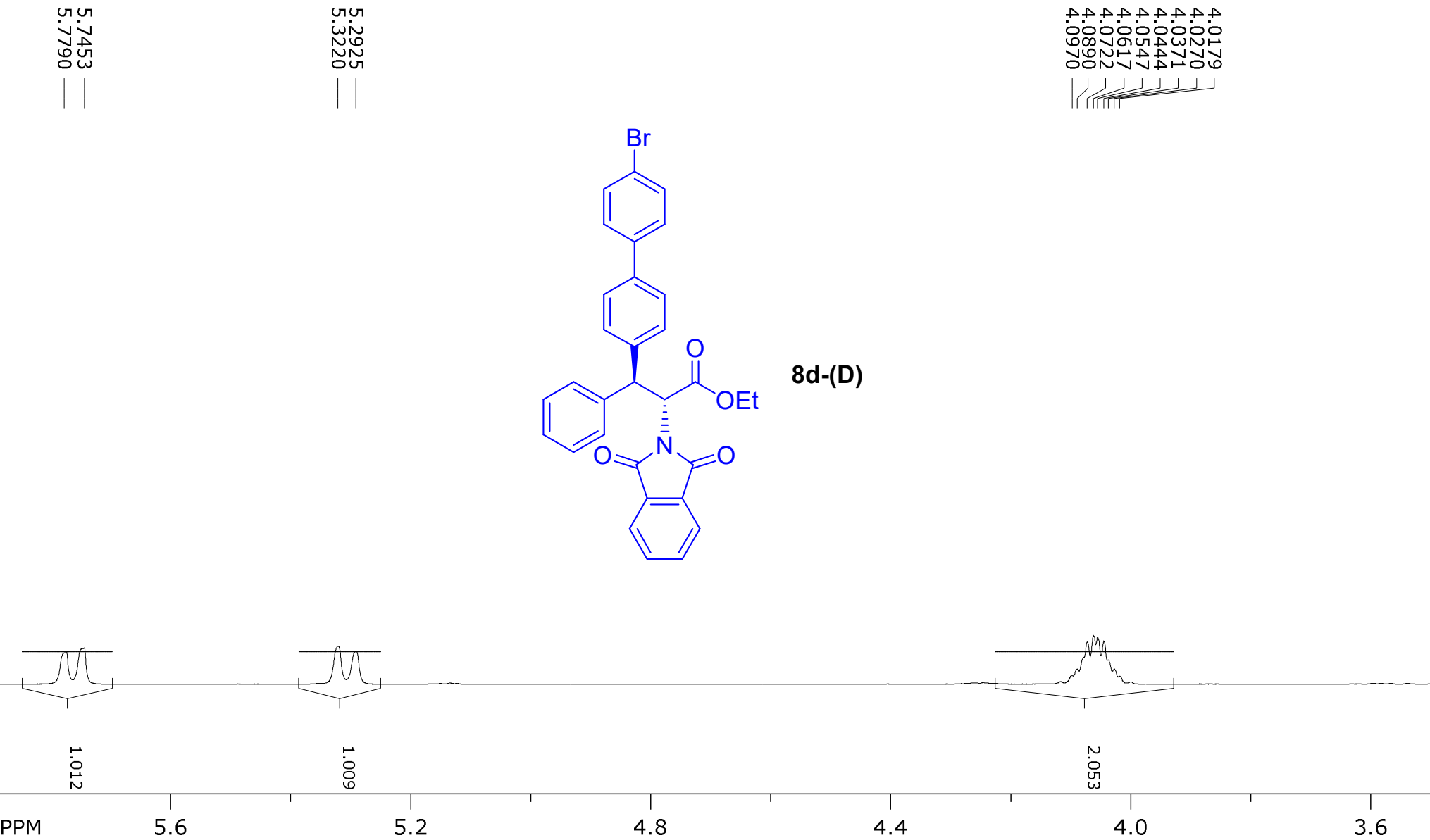
0.7325 —
0.7510 —
0.7691 —

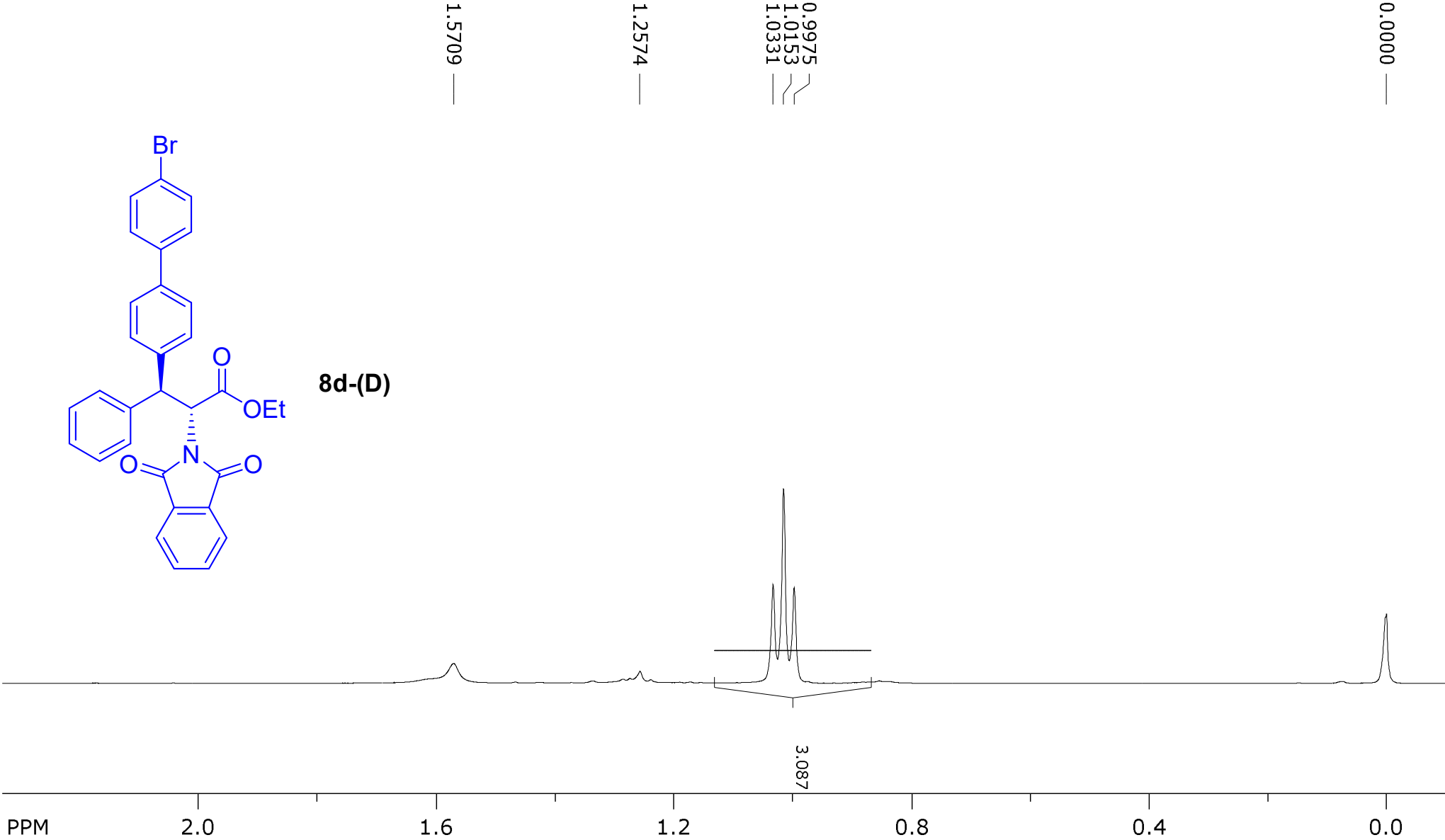


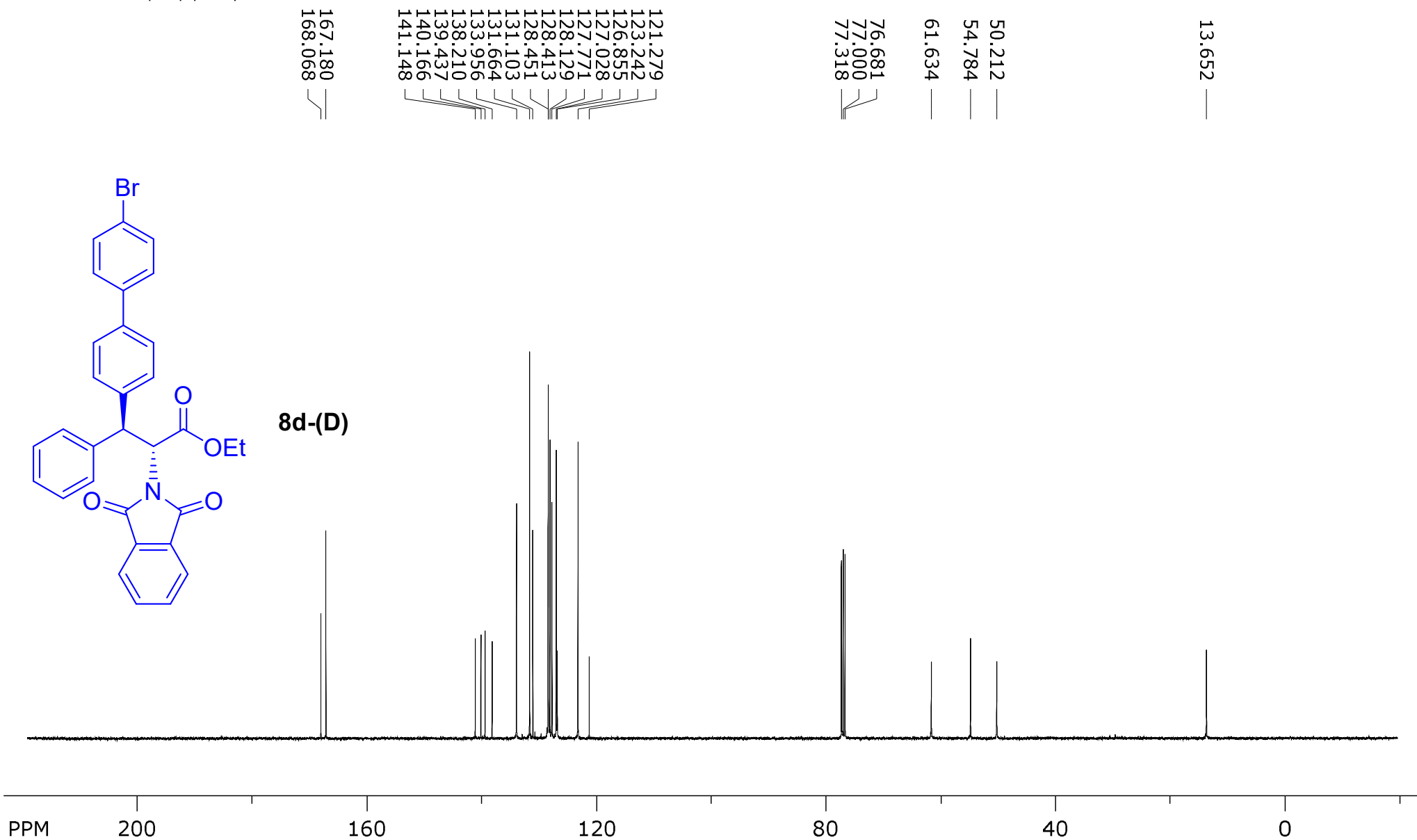


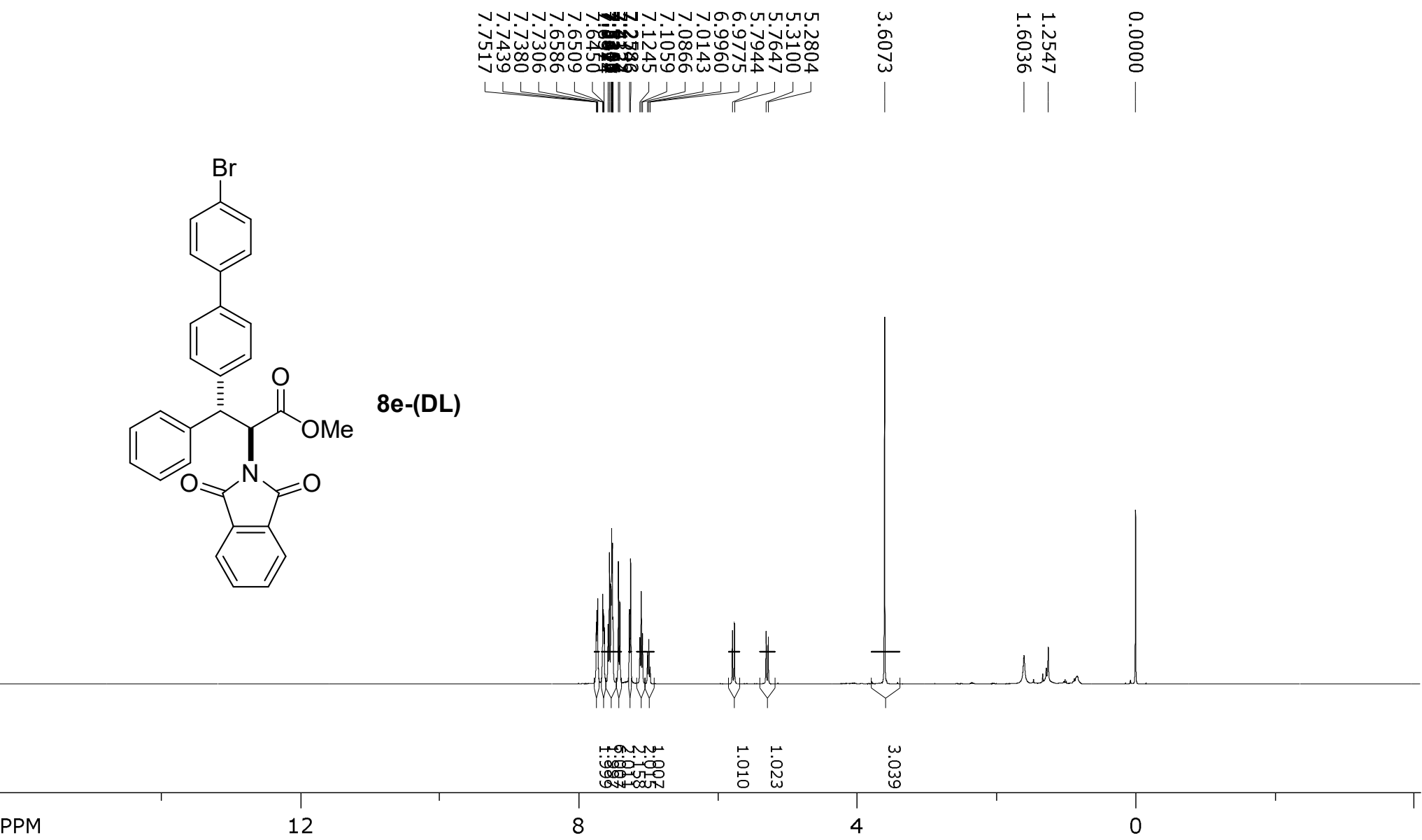


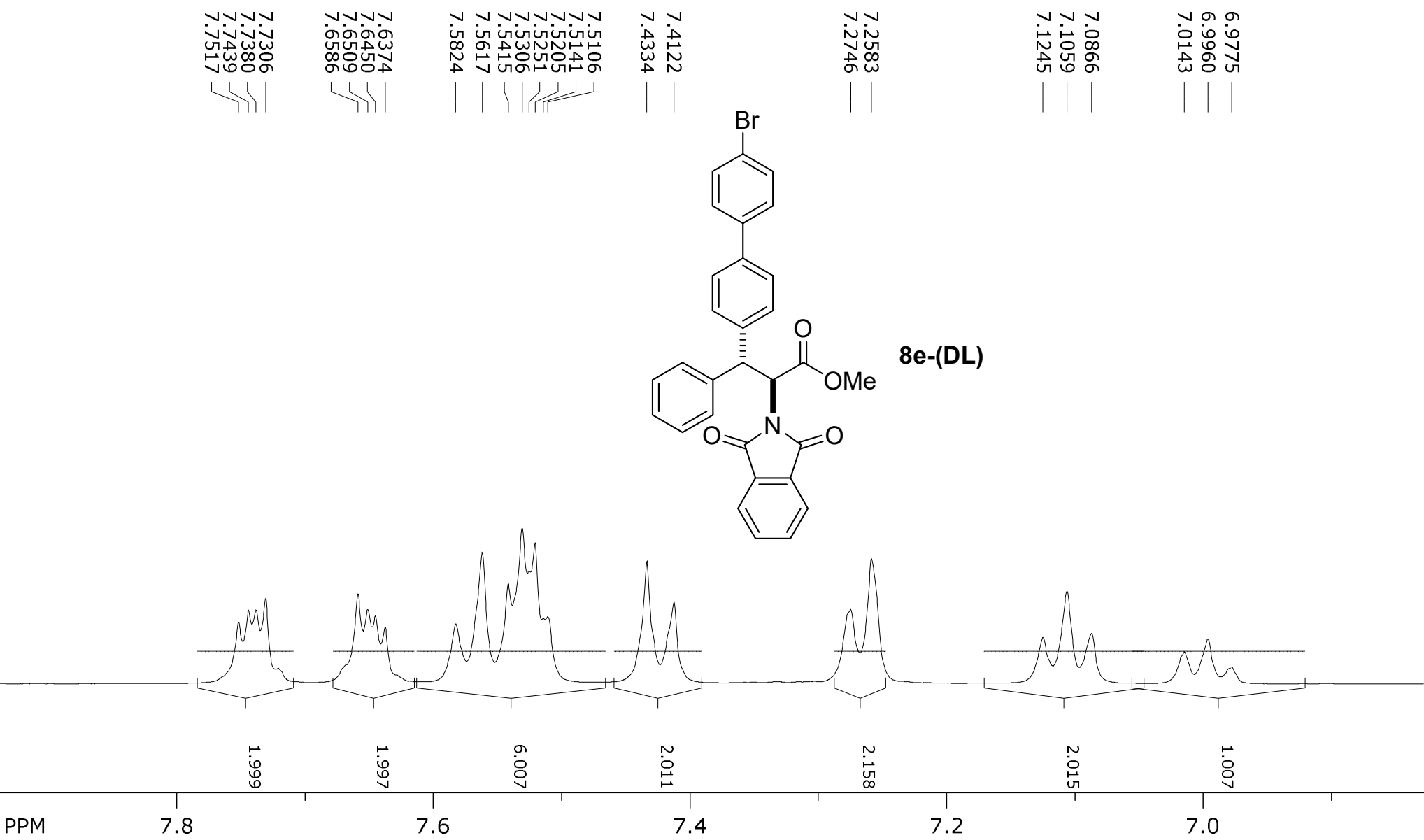


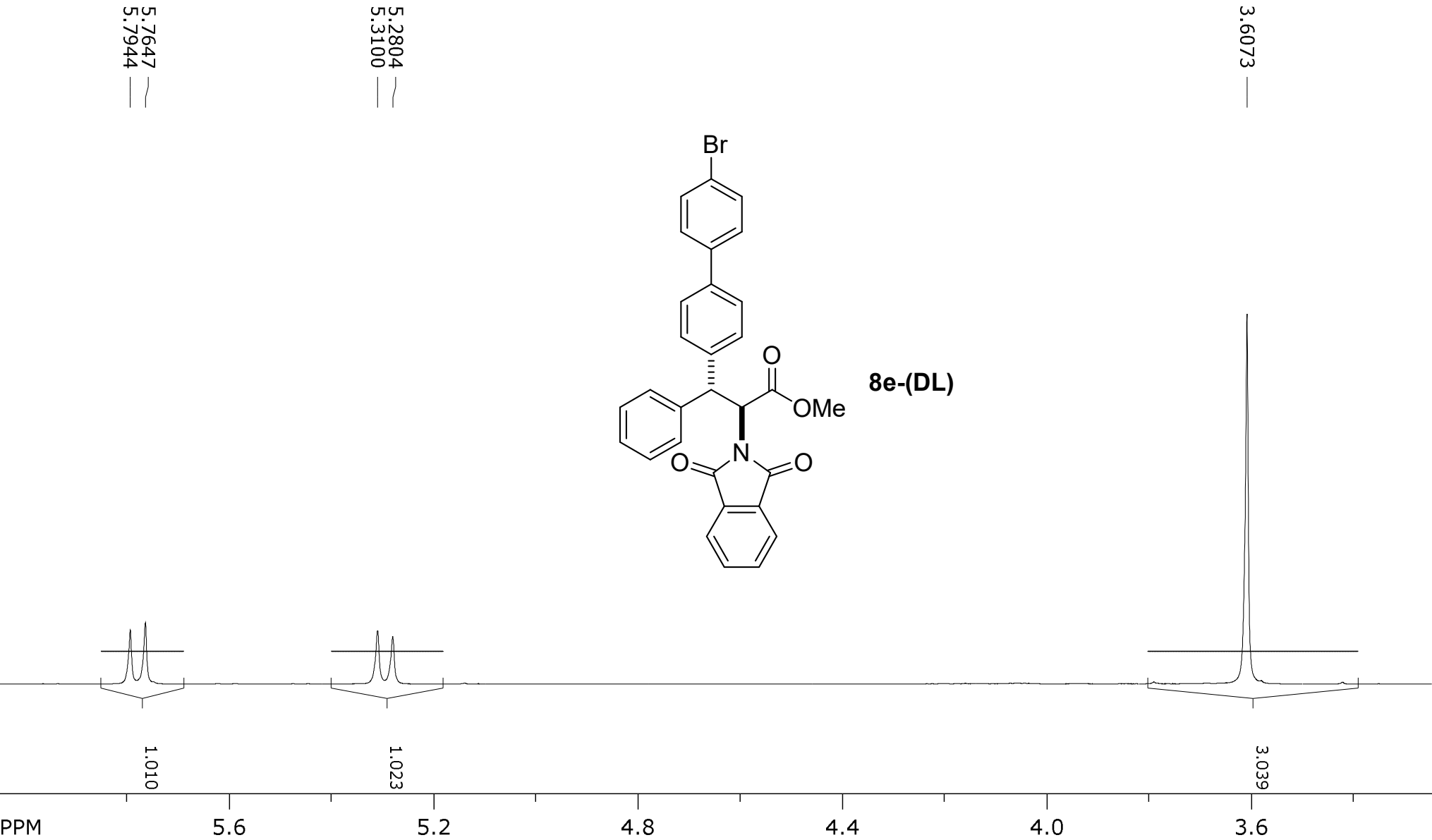


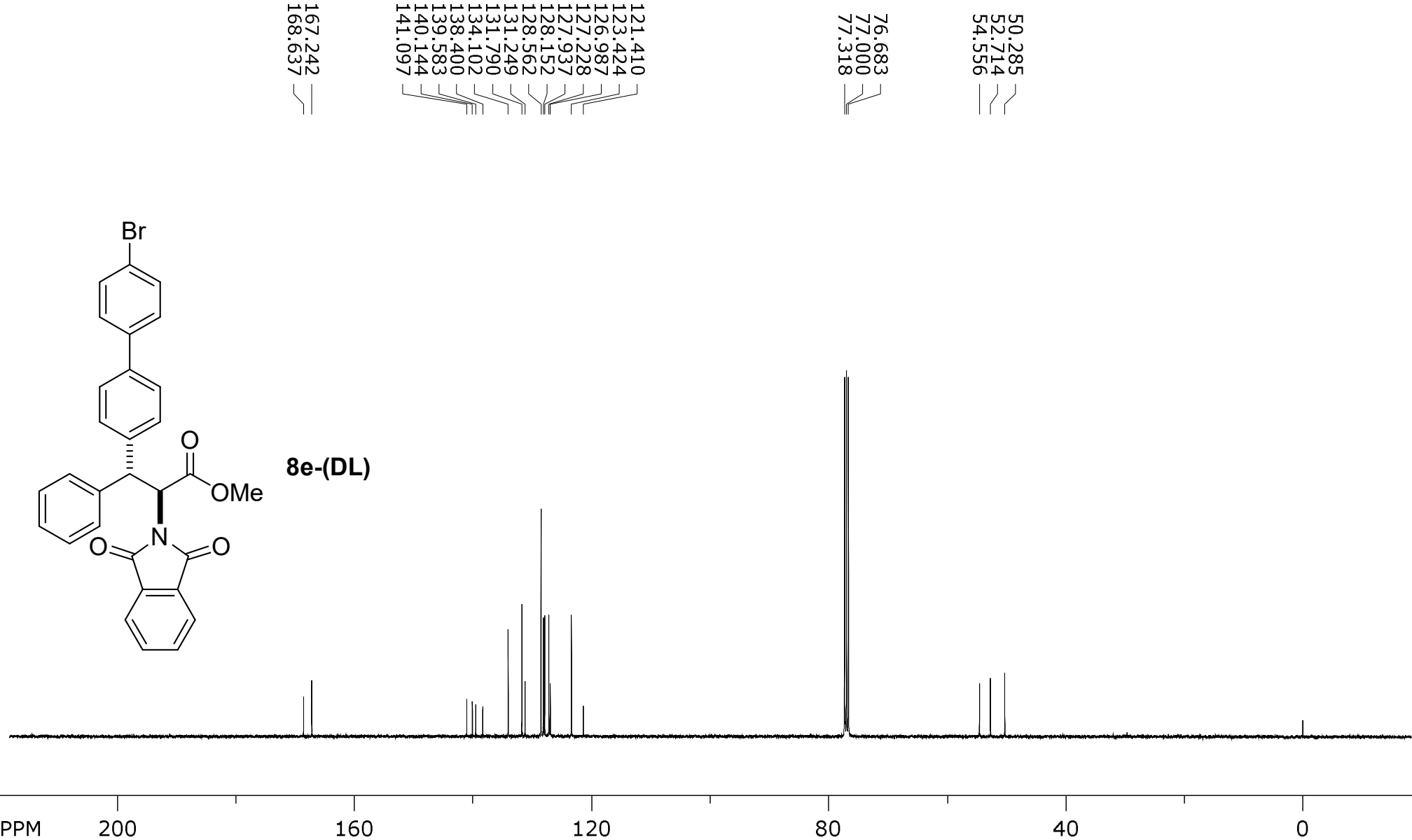


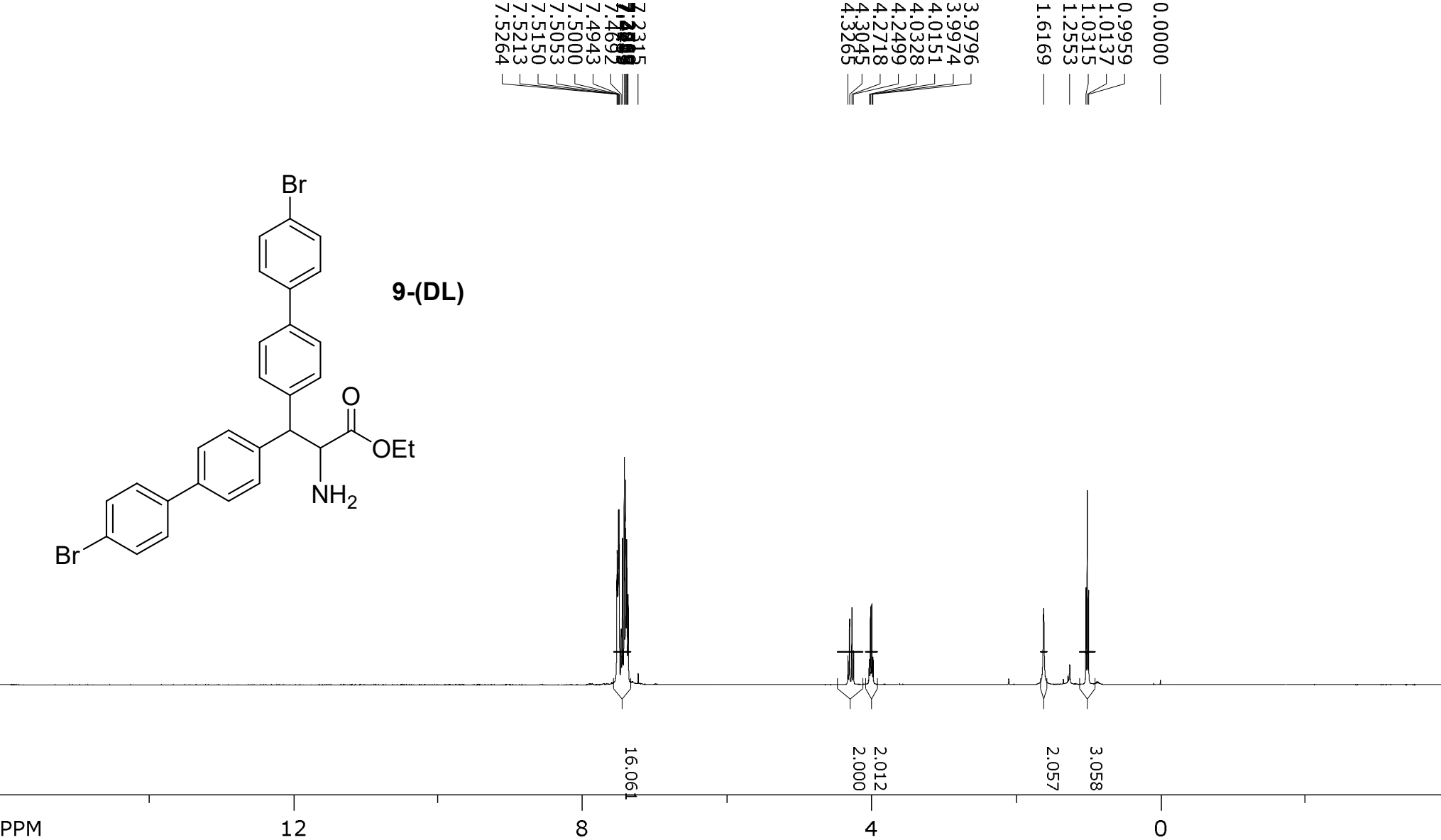


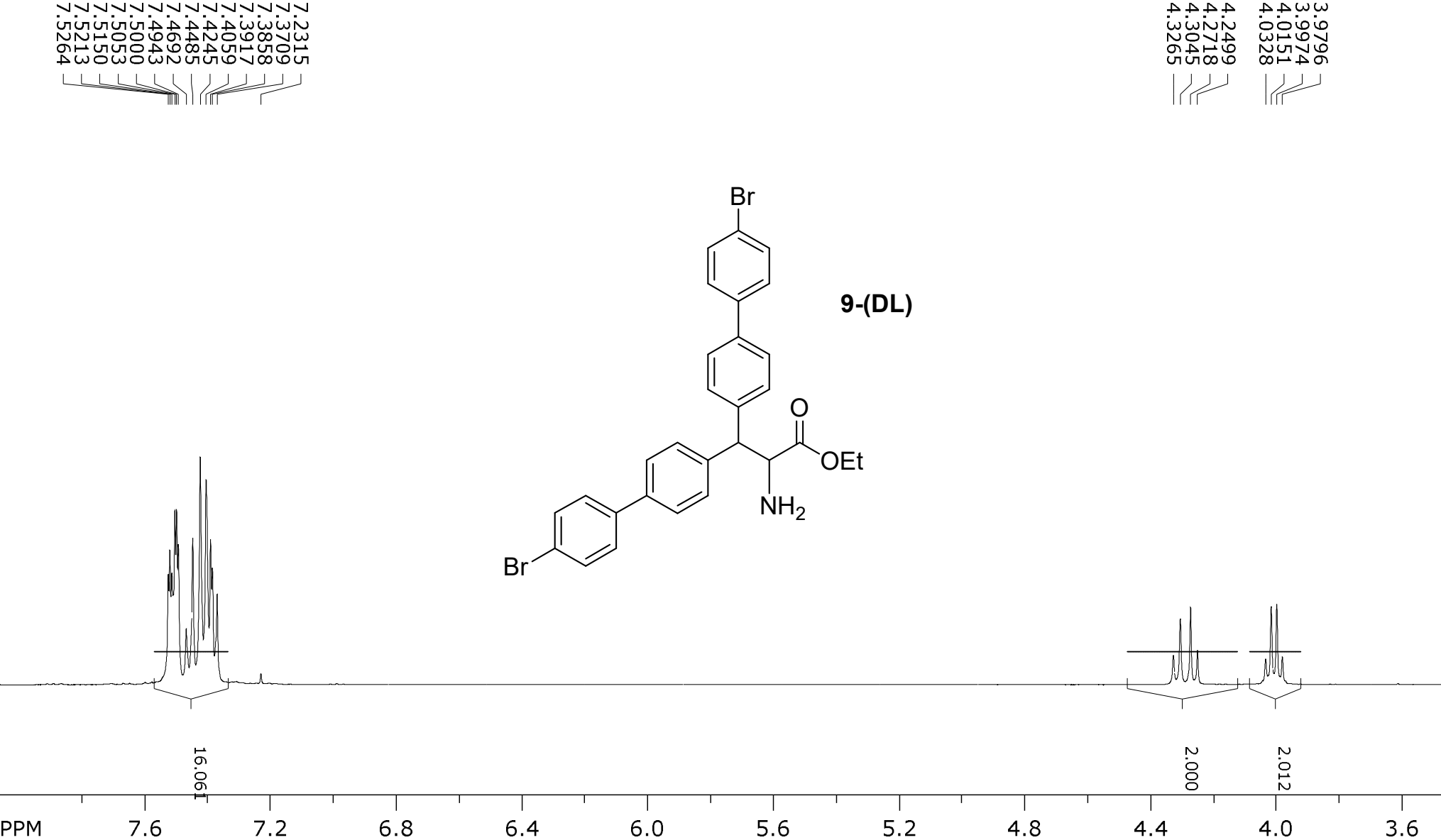


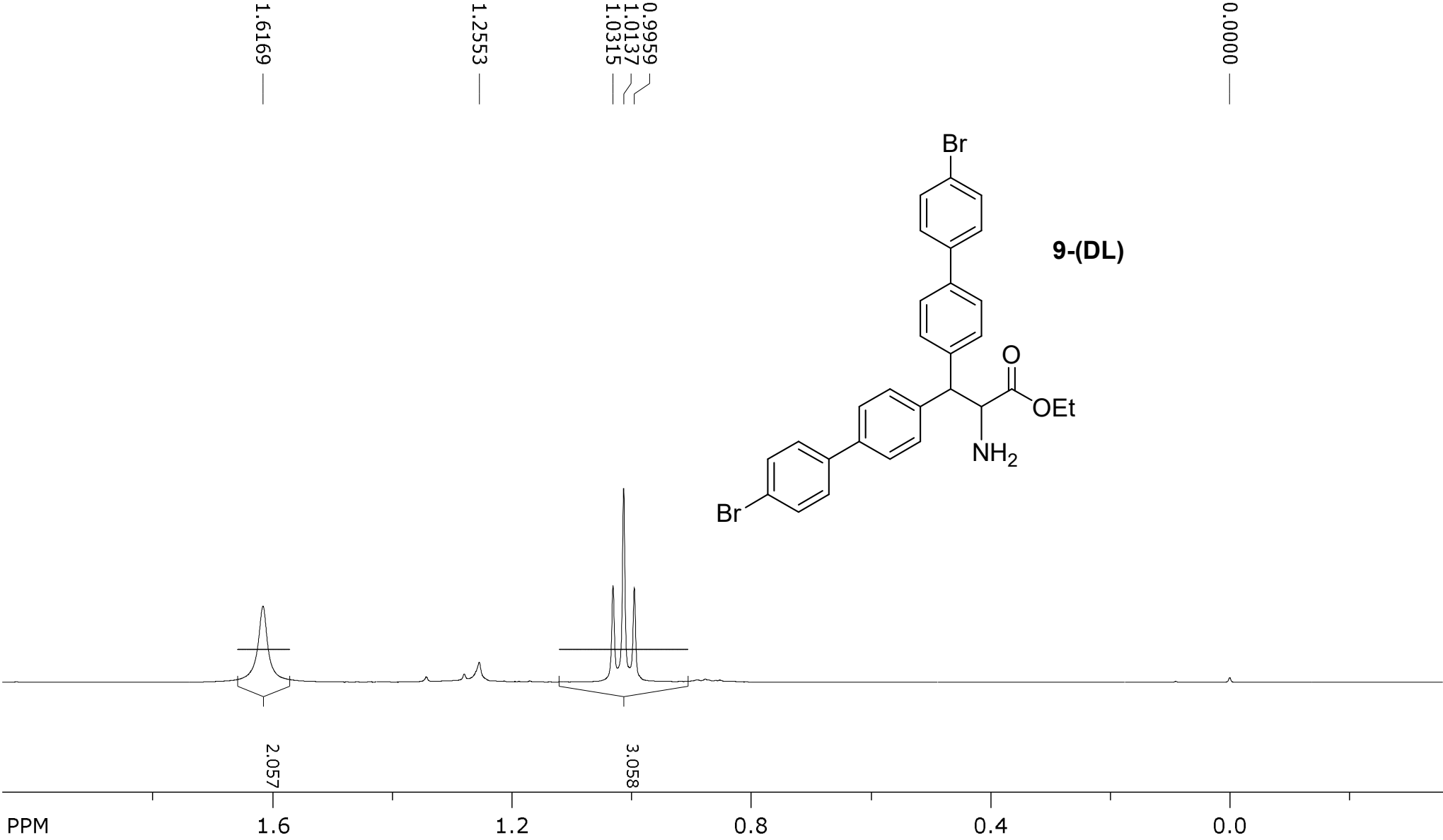


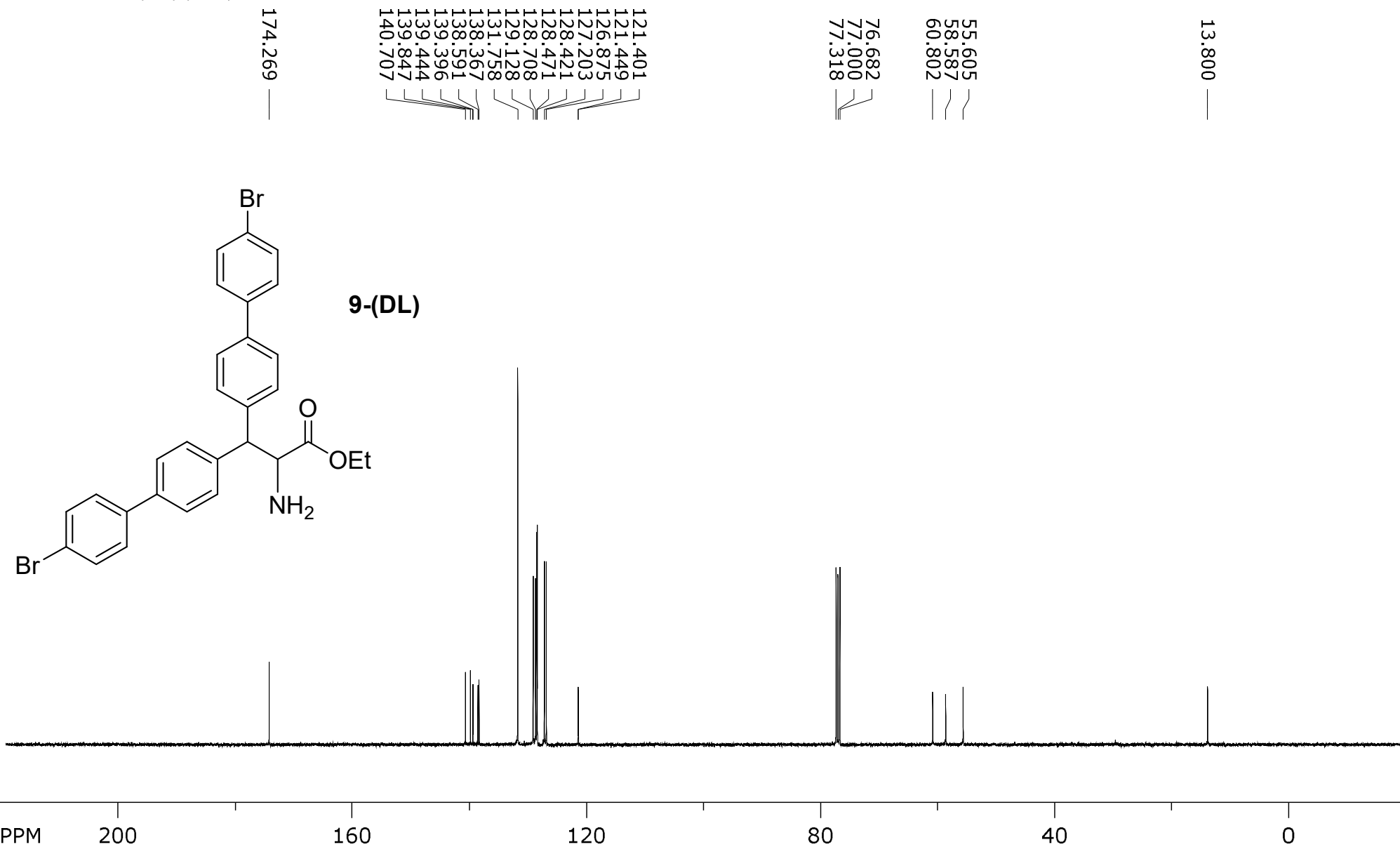


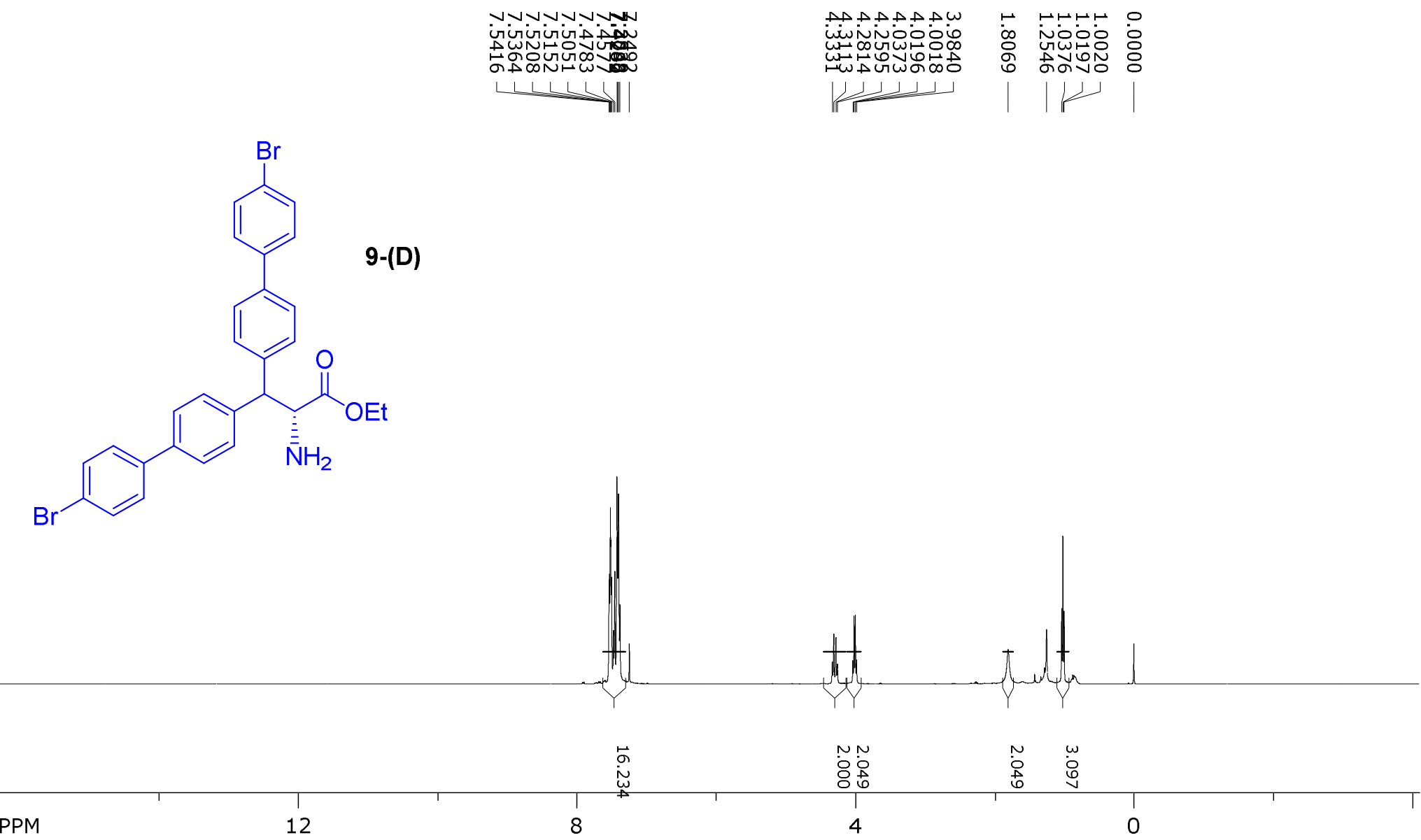


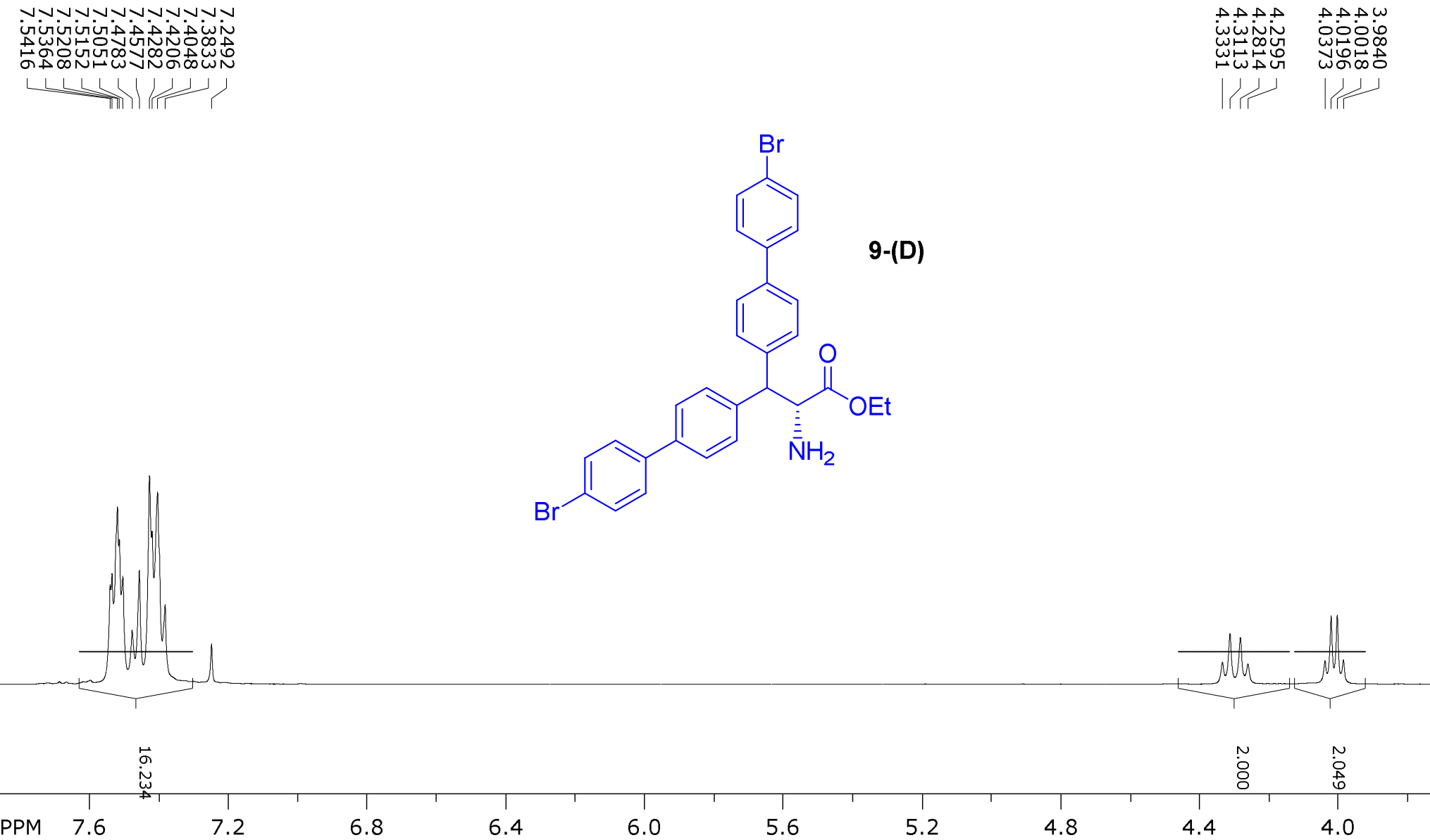


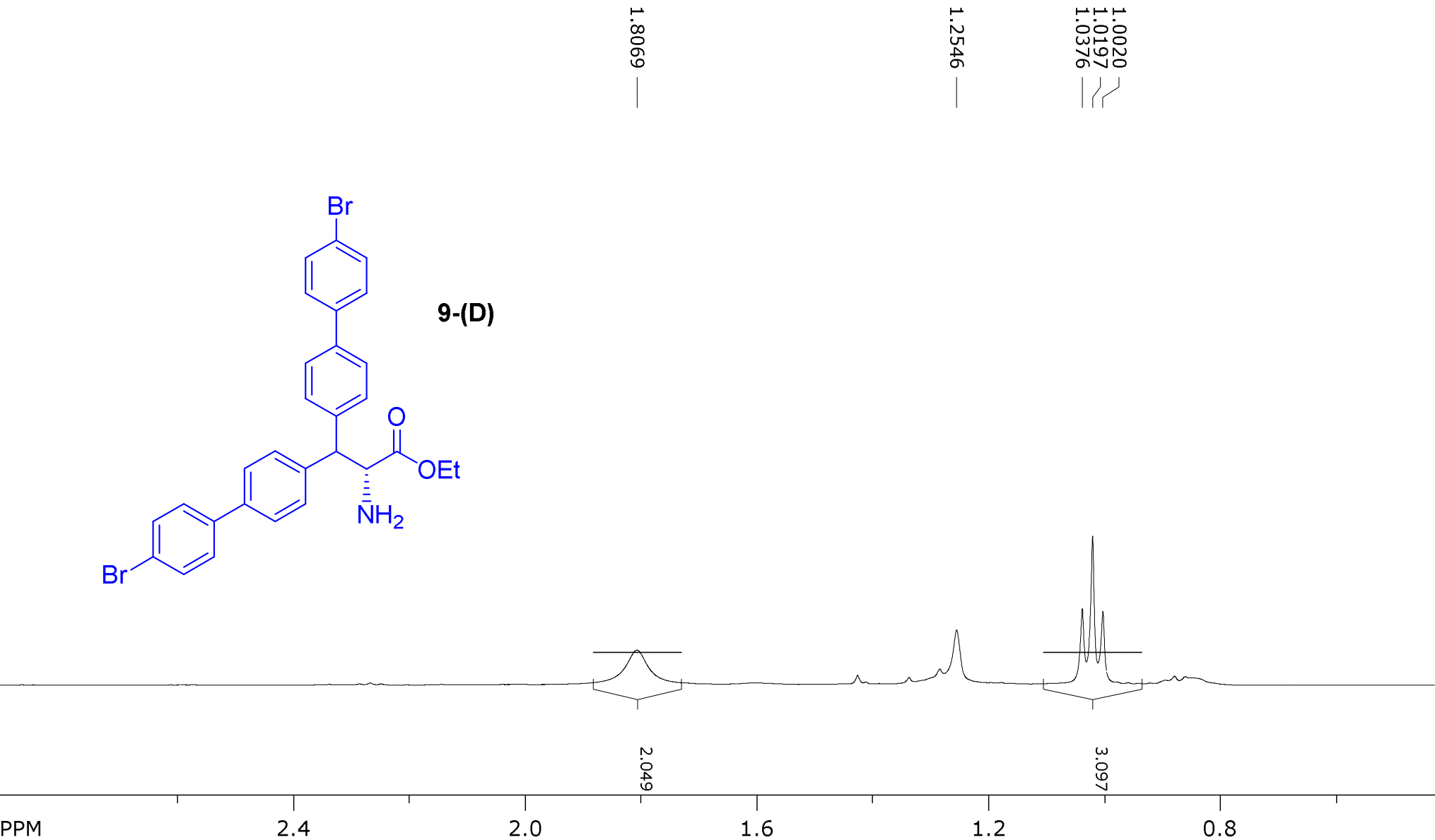


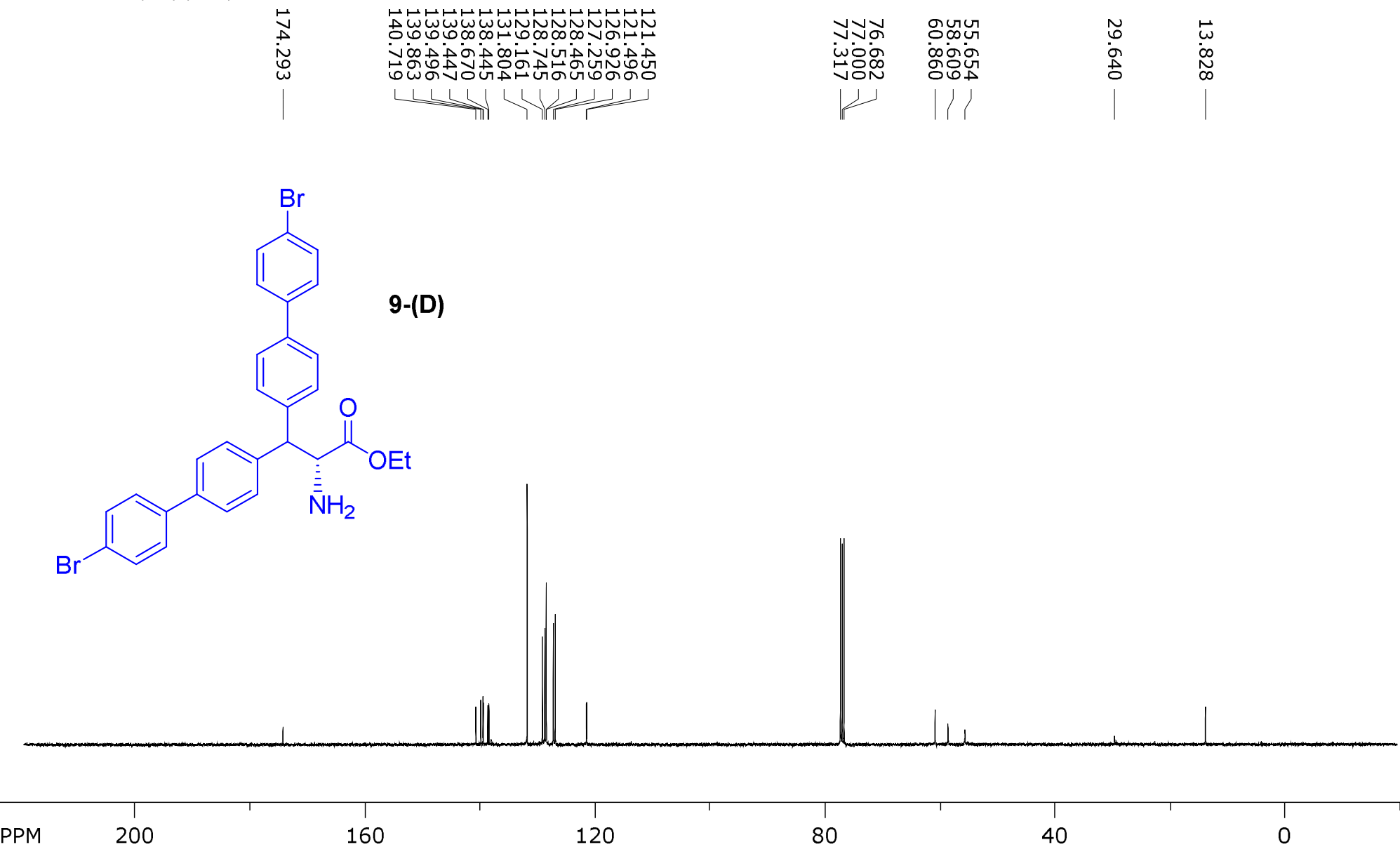


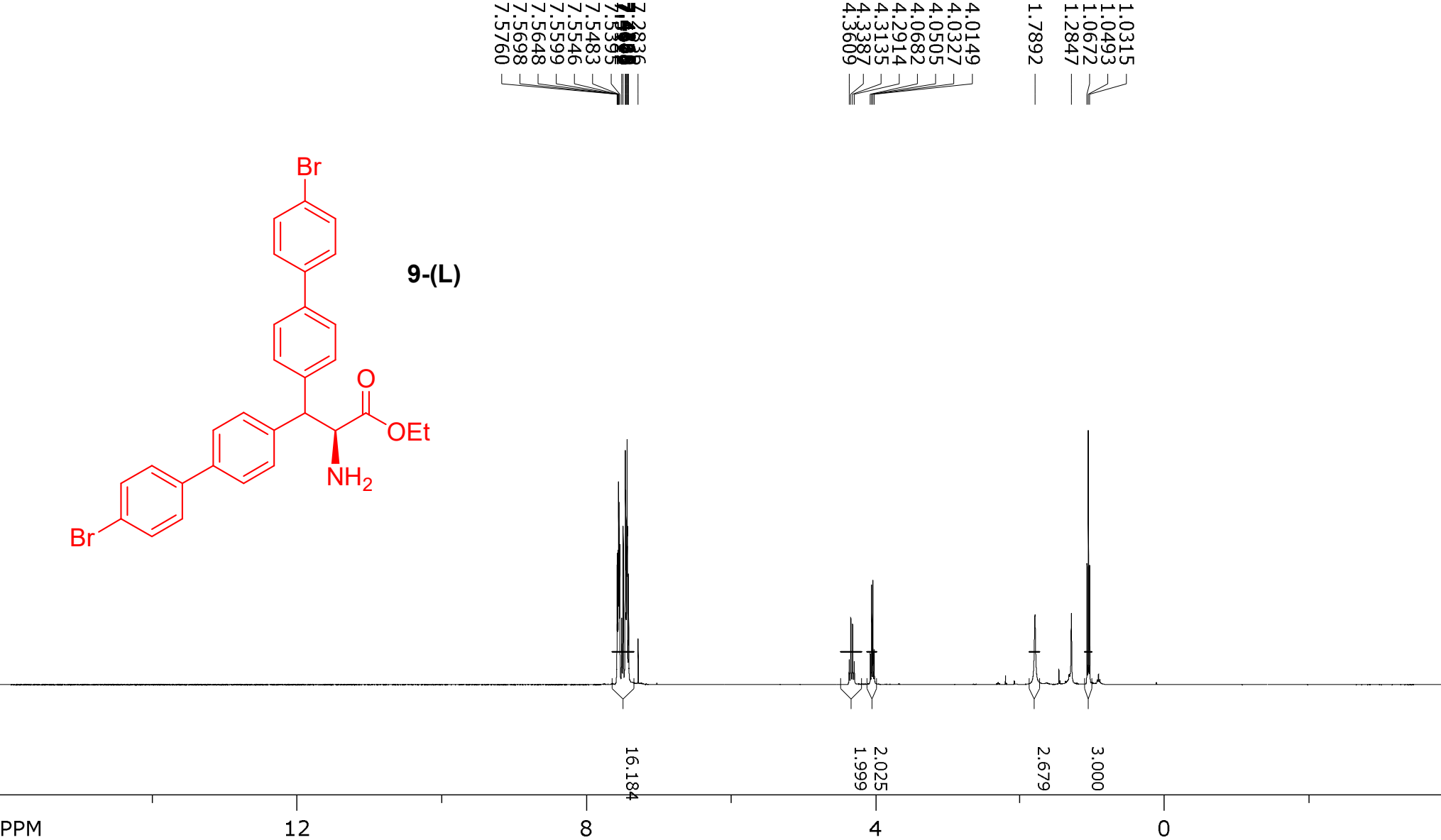


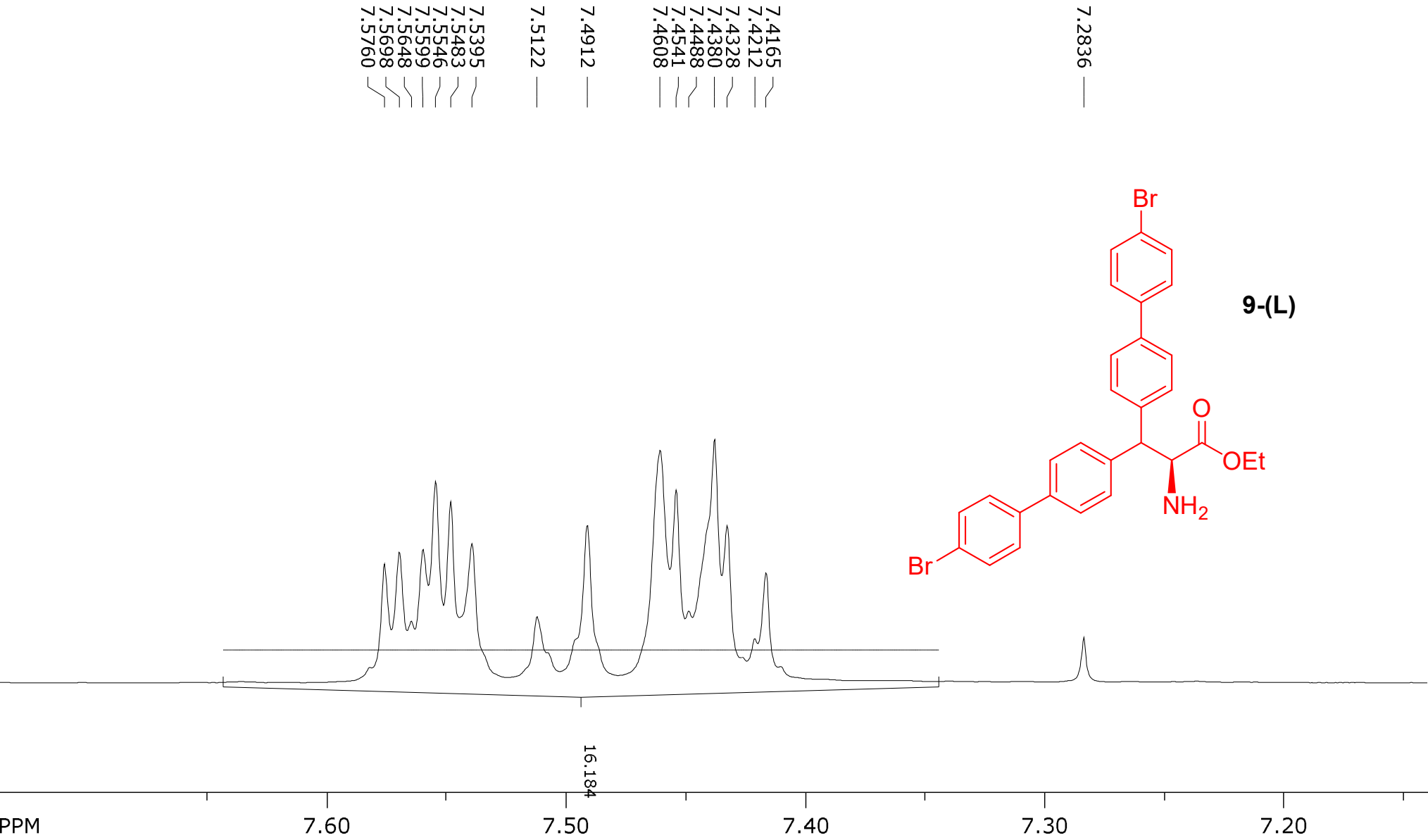


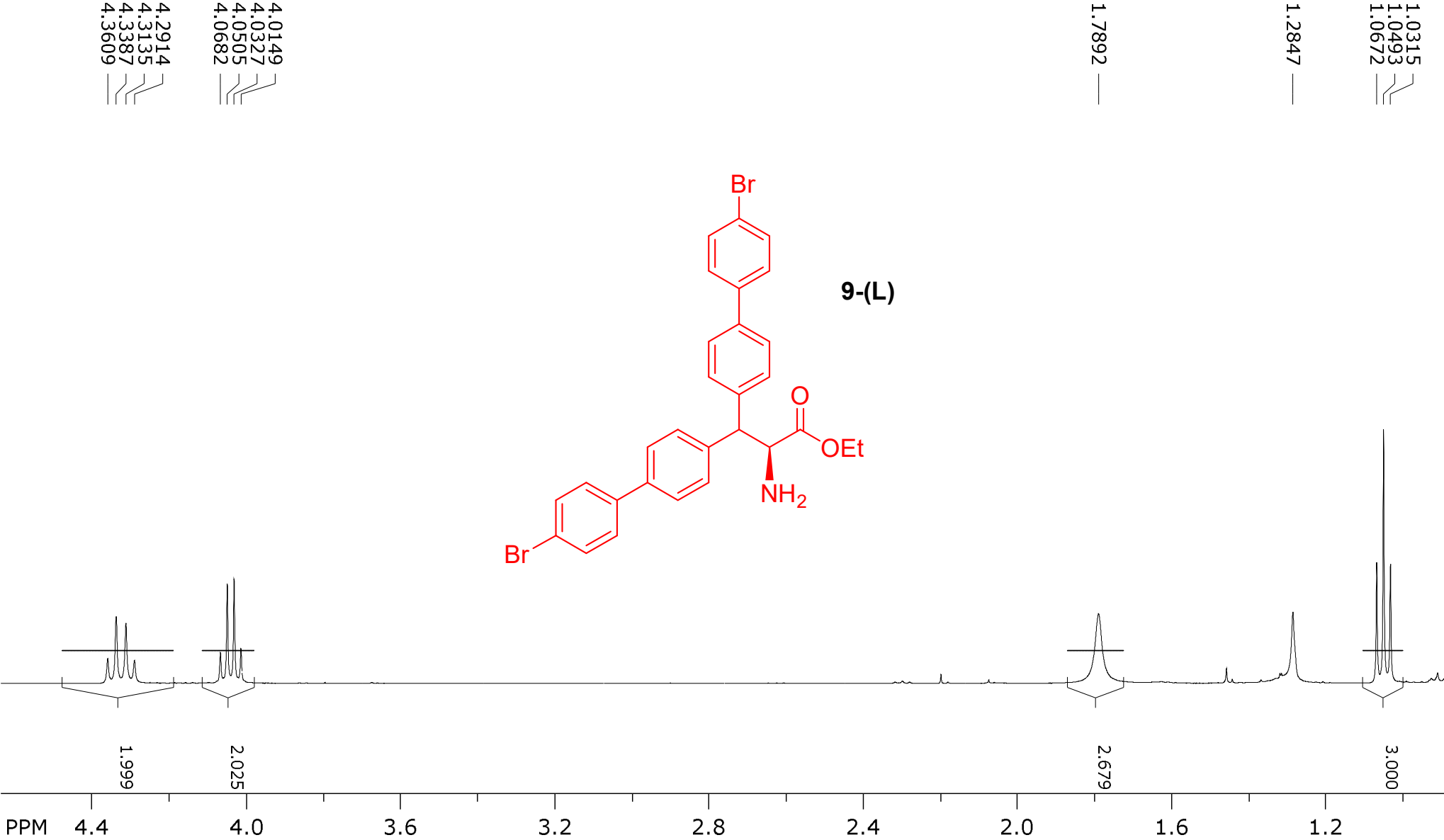


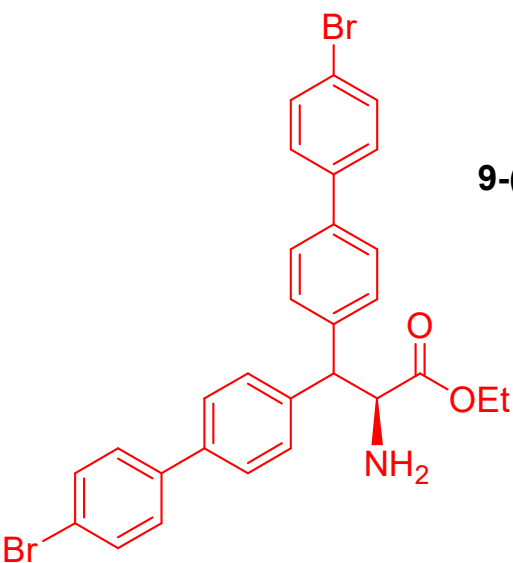




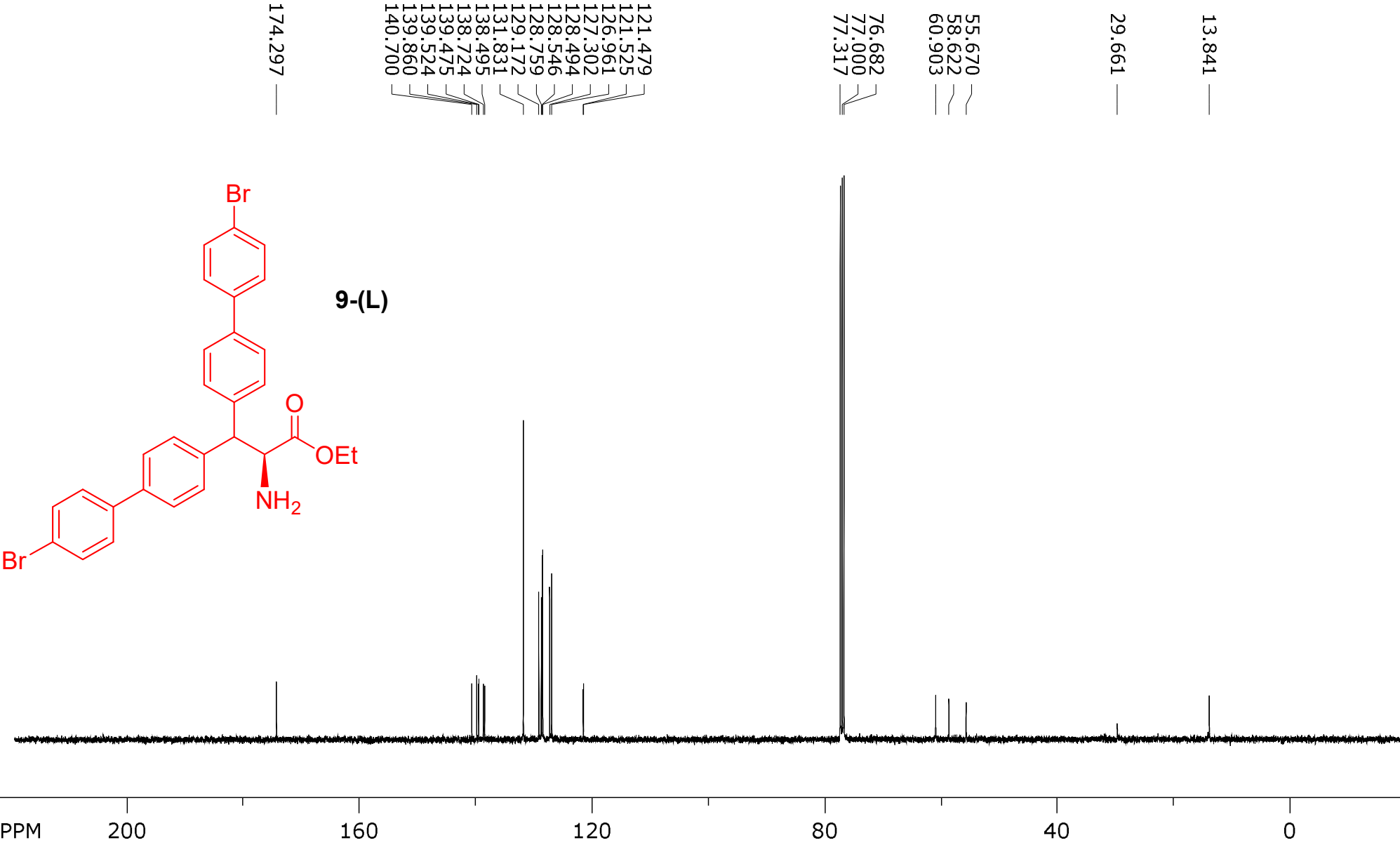


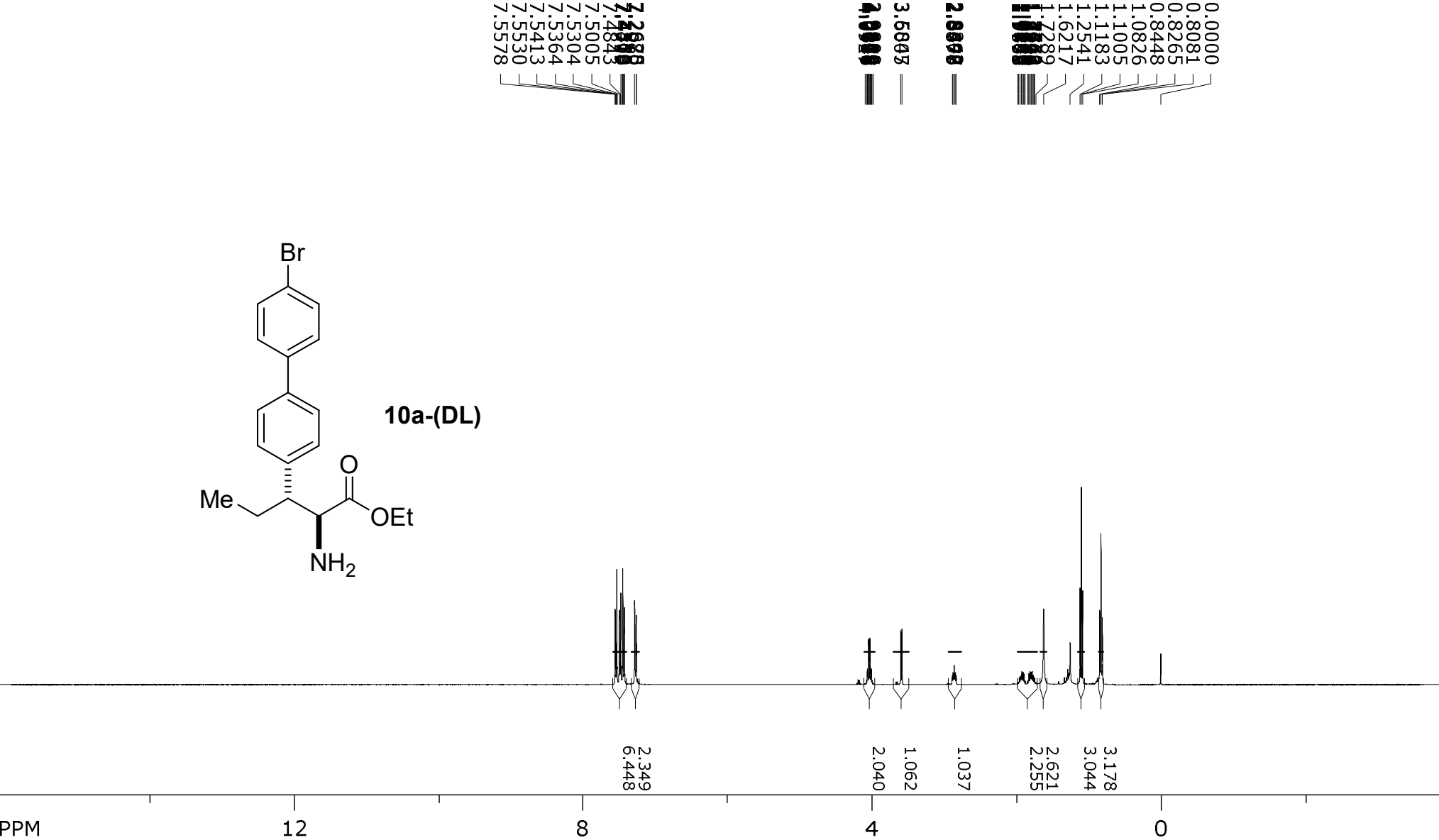


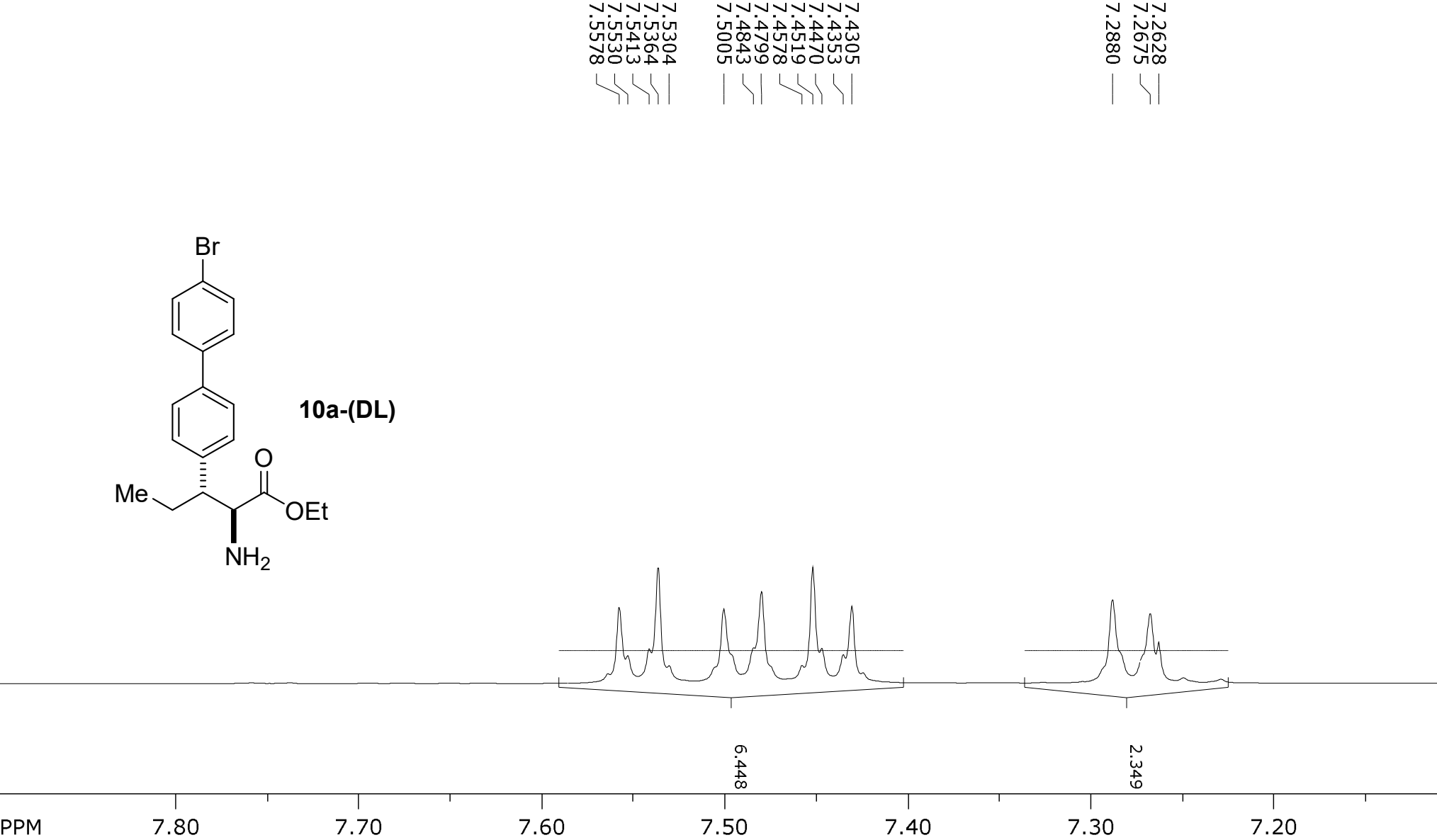
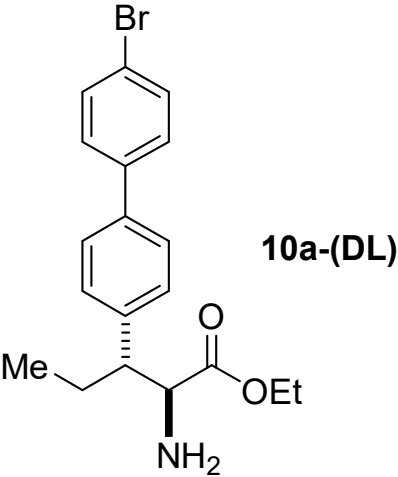




9-(L)

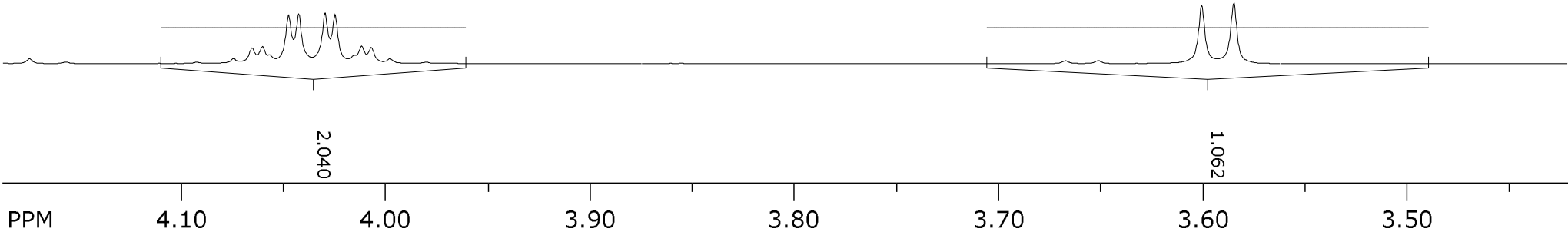
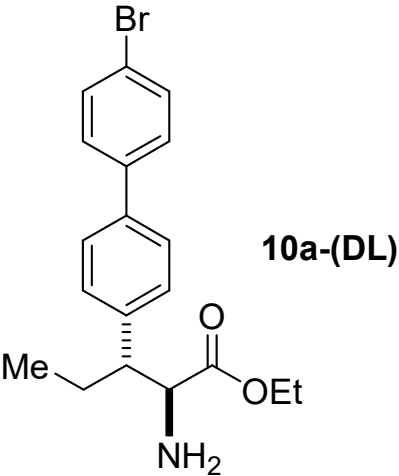


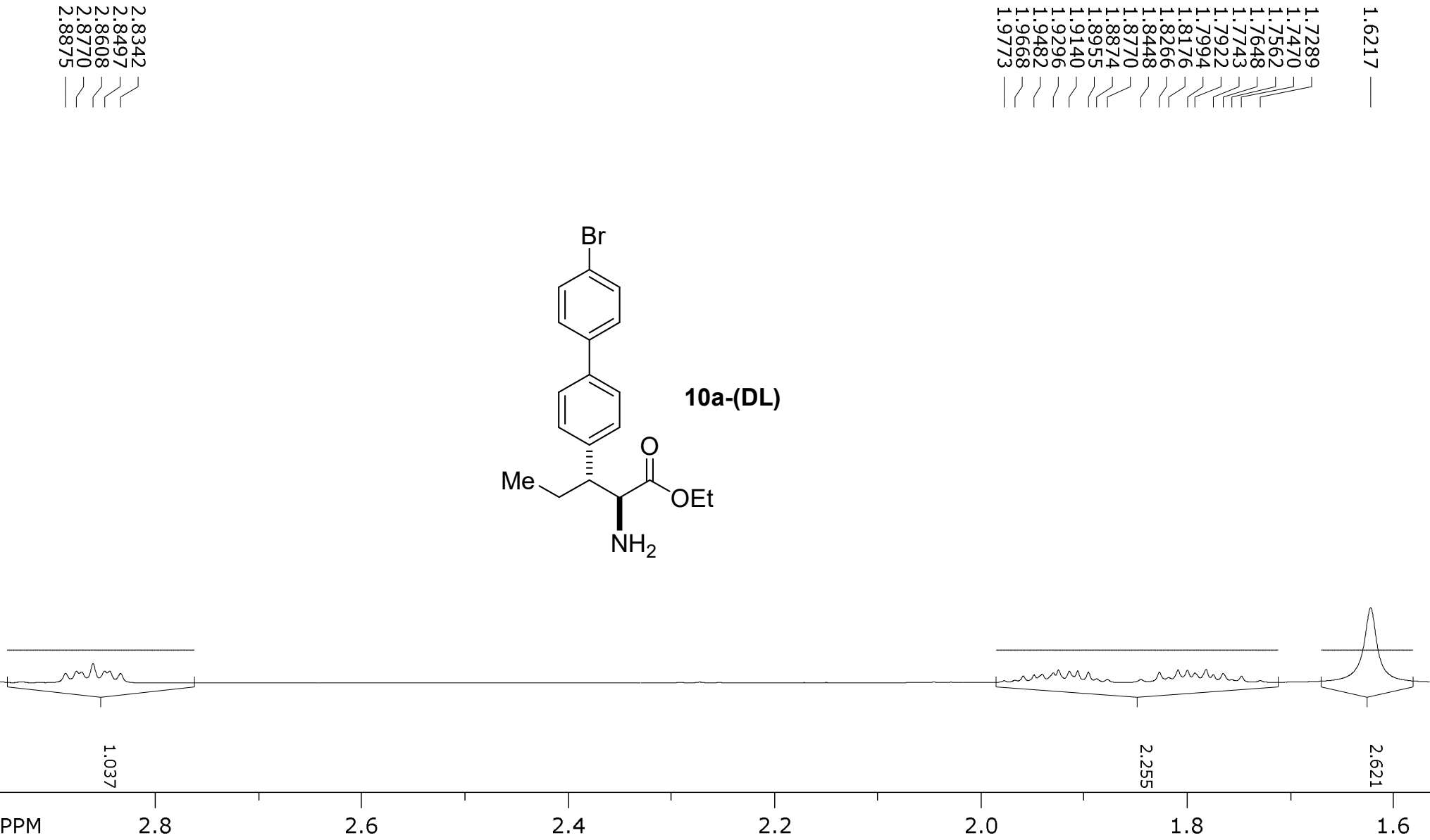


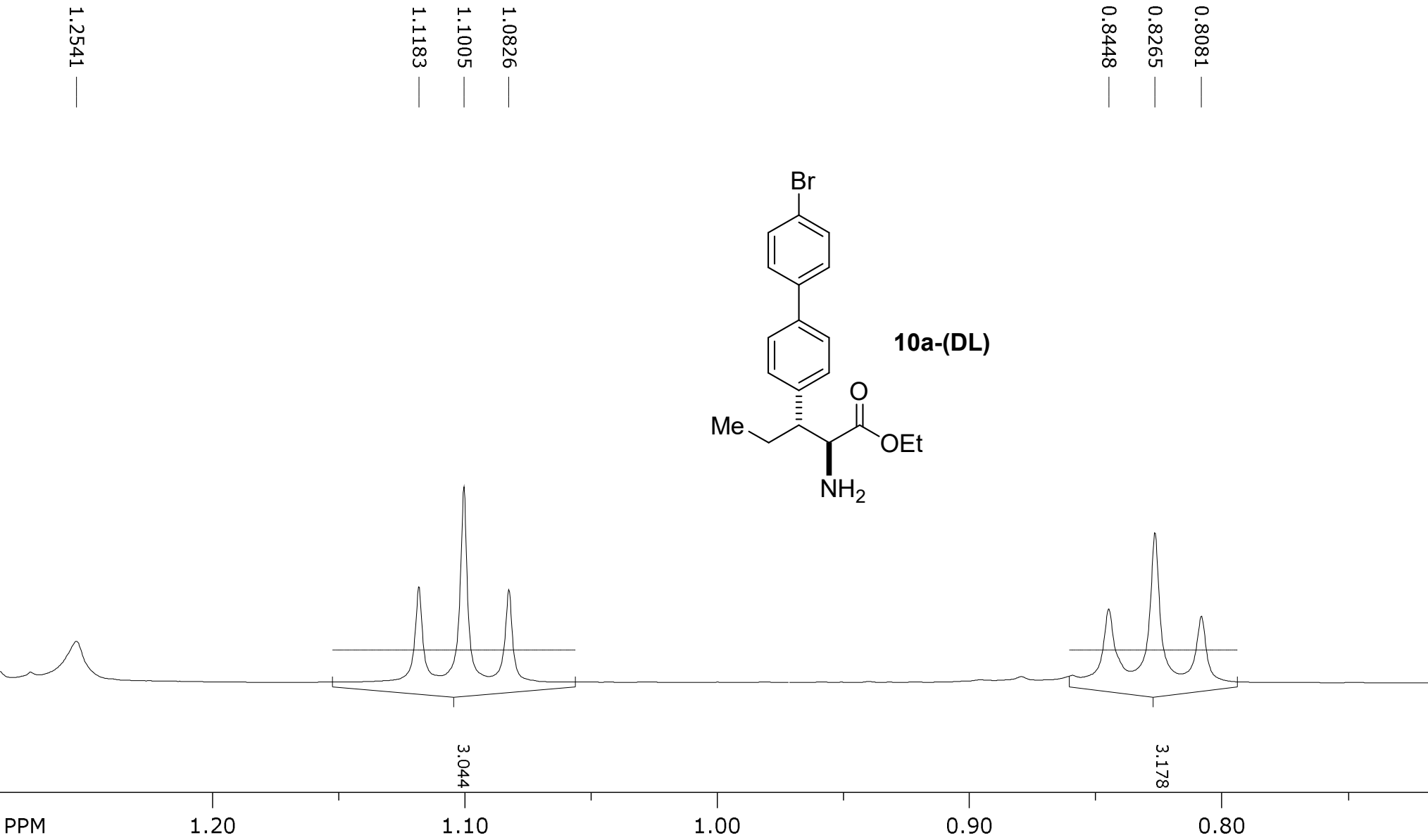


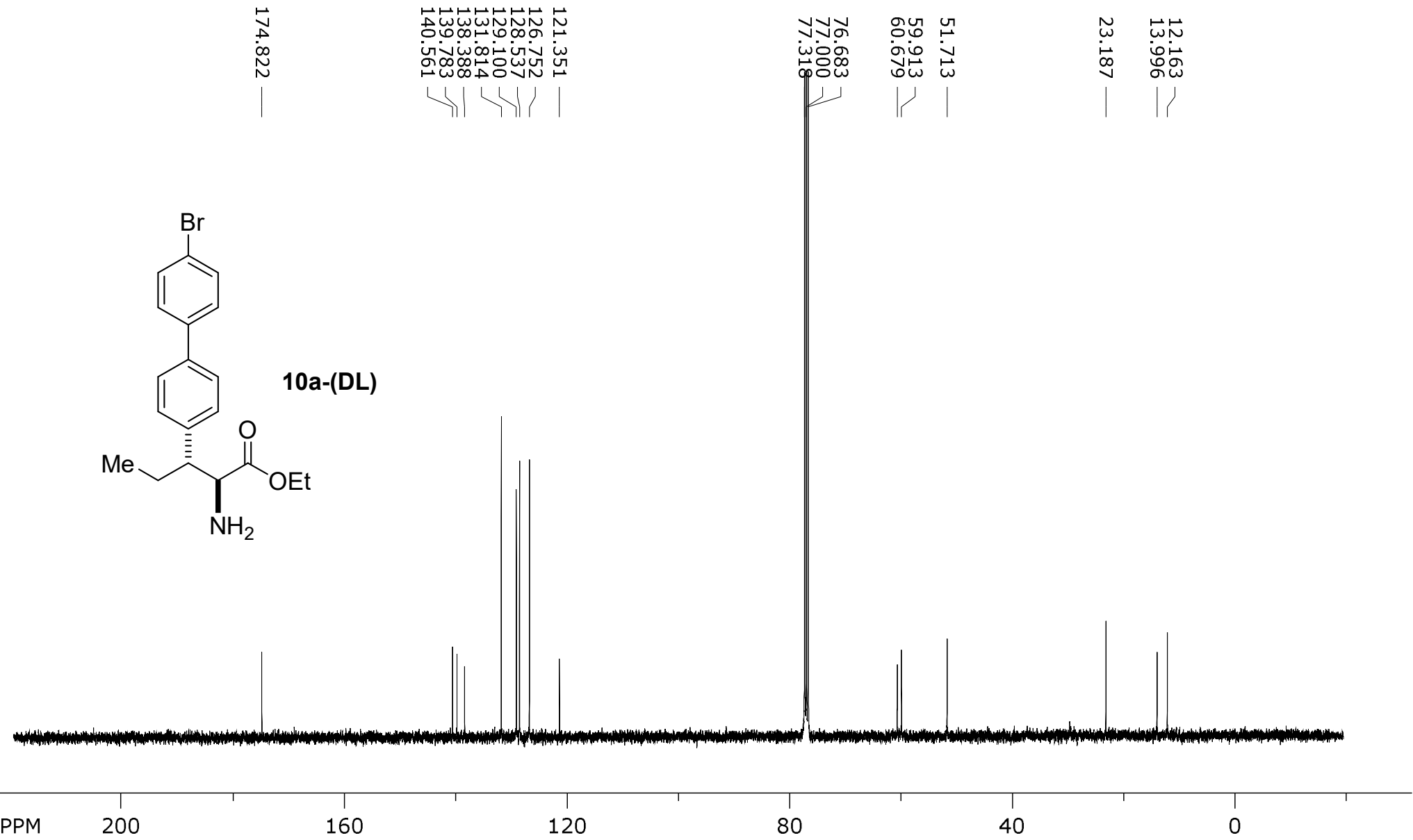
3.9800
3.9985
4.0072
4.0119
4.0249
4.0298
4.0427
4.0477
4.0605
4.0656
4.0746
4.0927

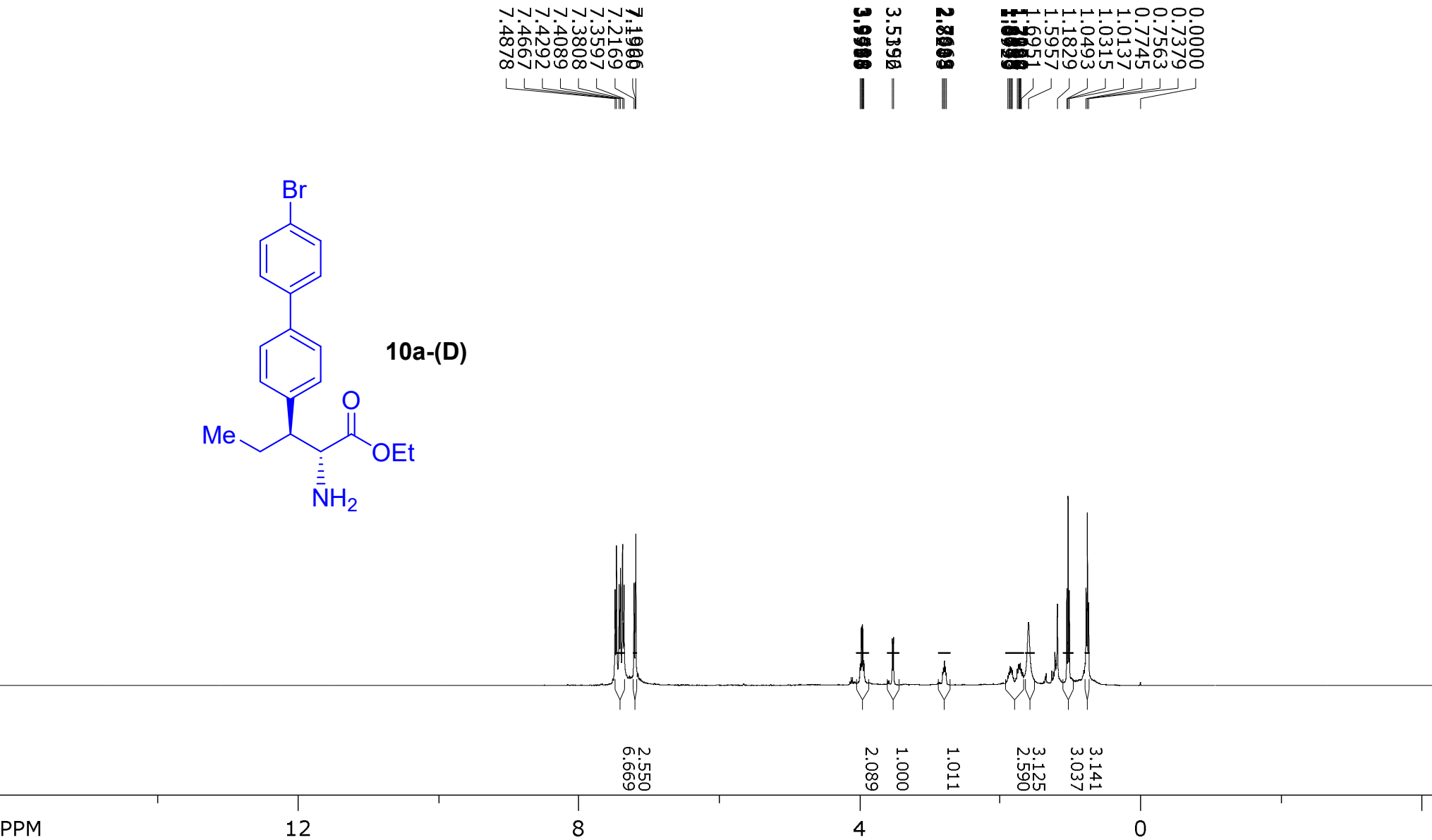
3.5847
3.6005

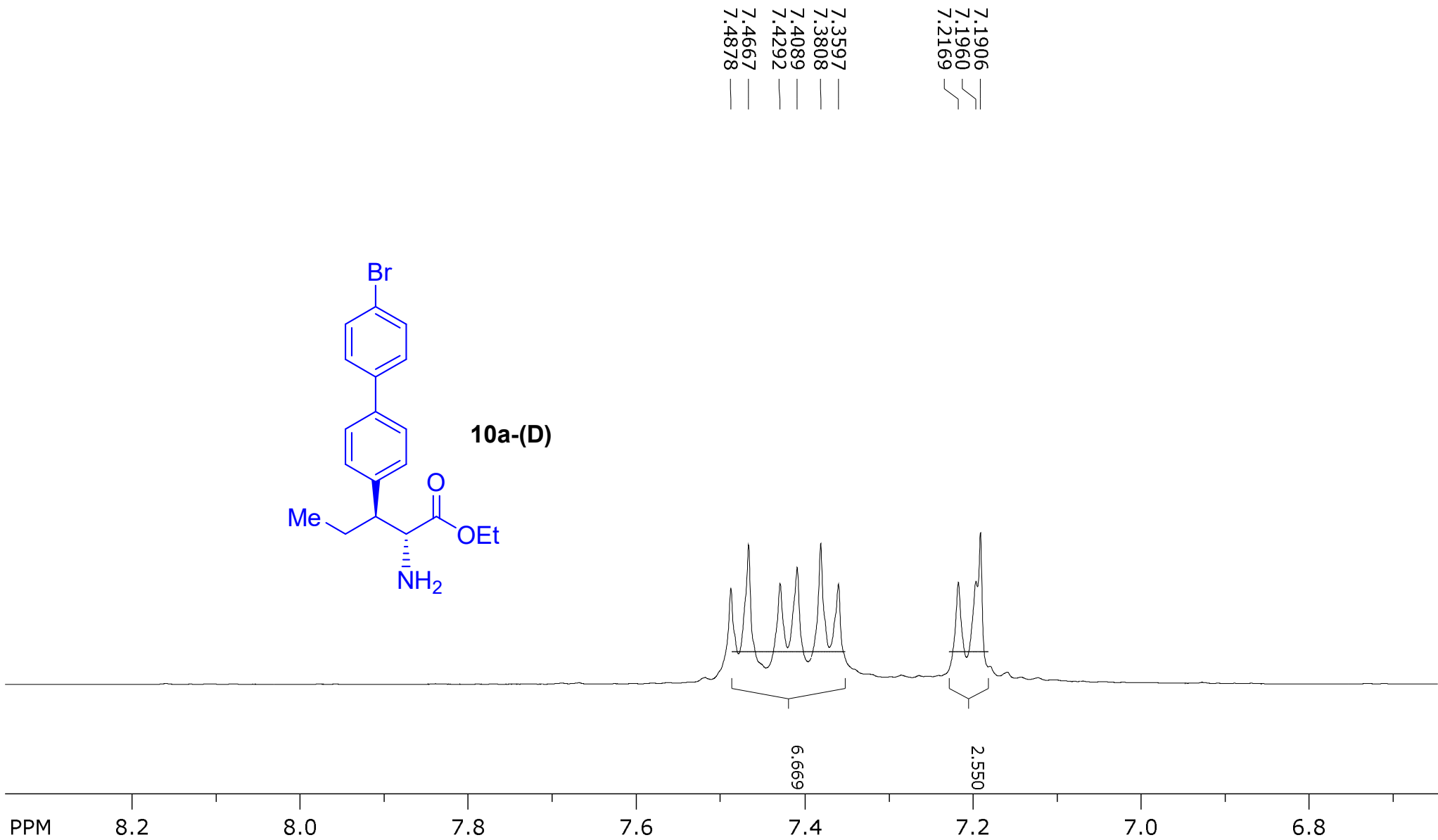








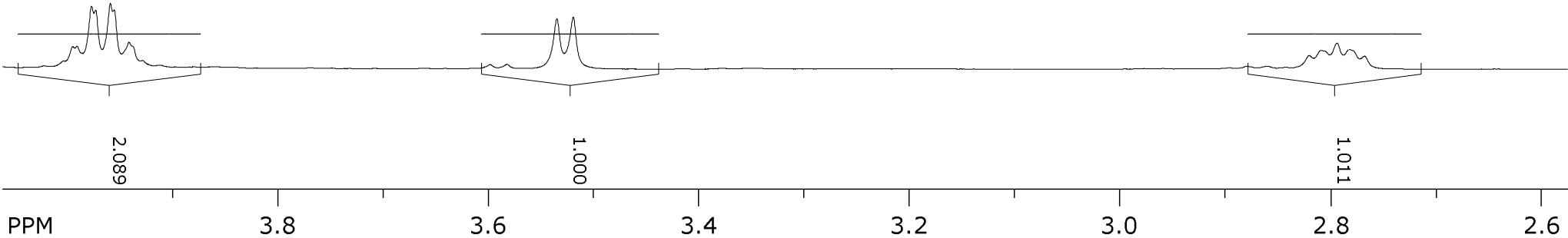
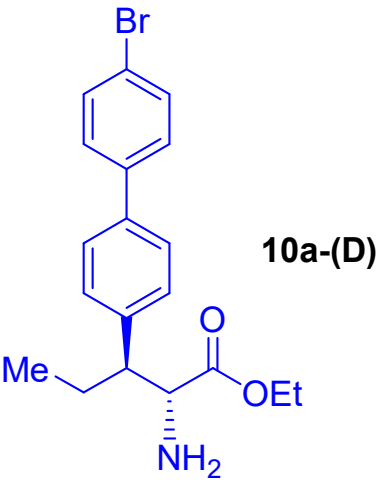


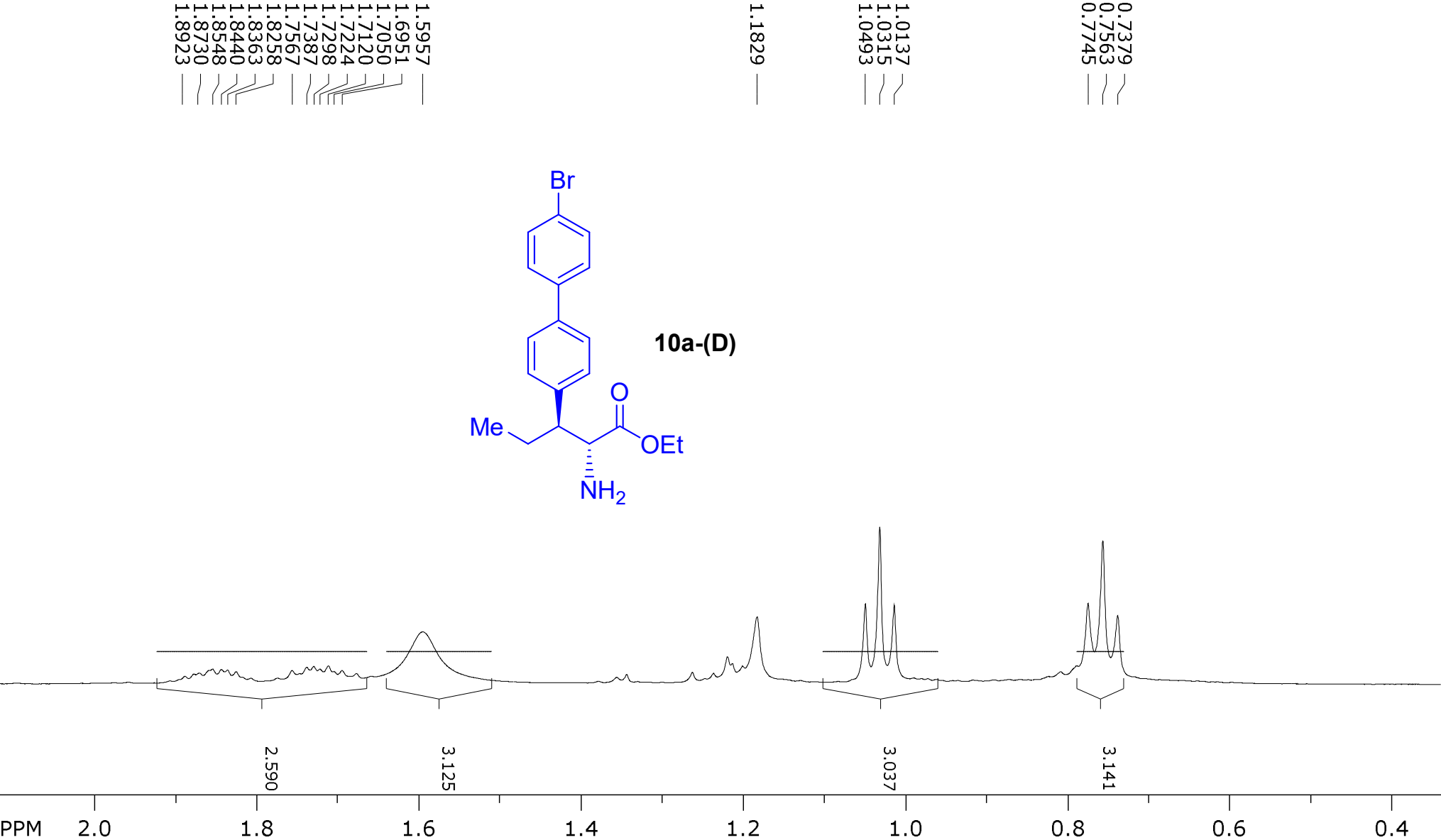


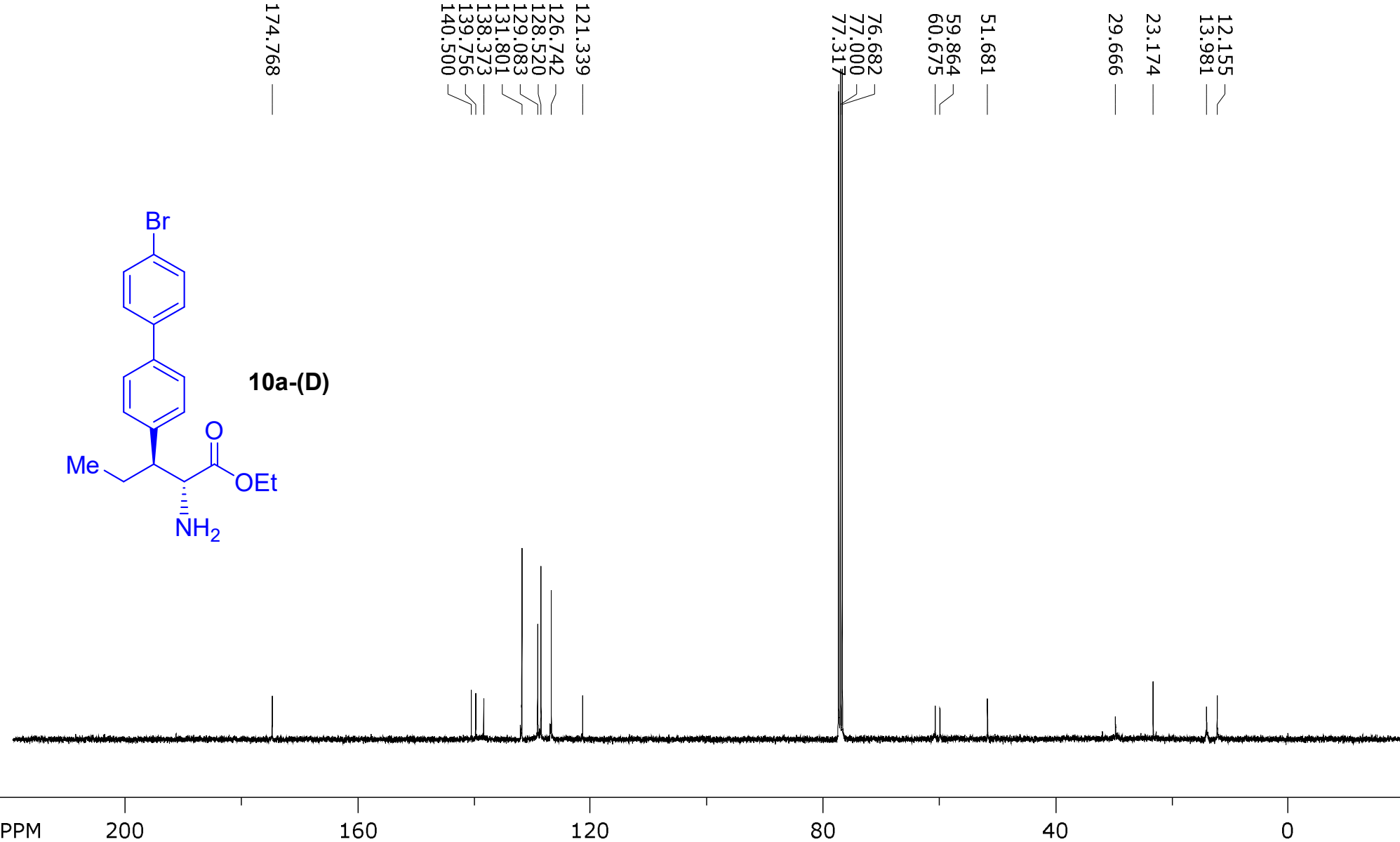
3.9420
3.9561
3.9598
3.9738
3.9777
3.9913

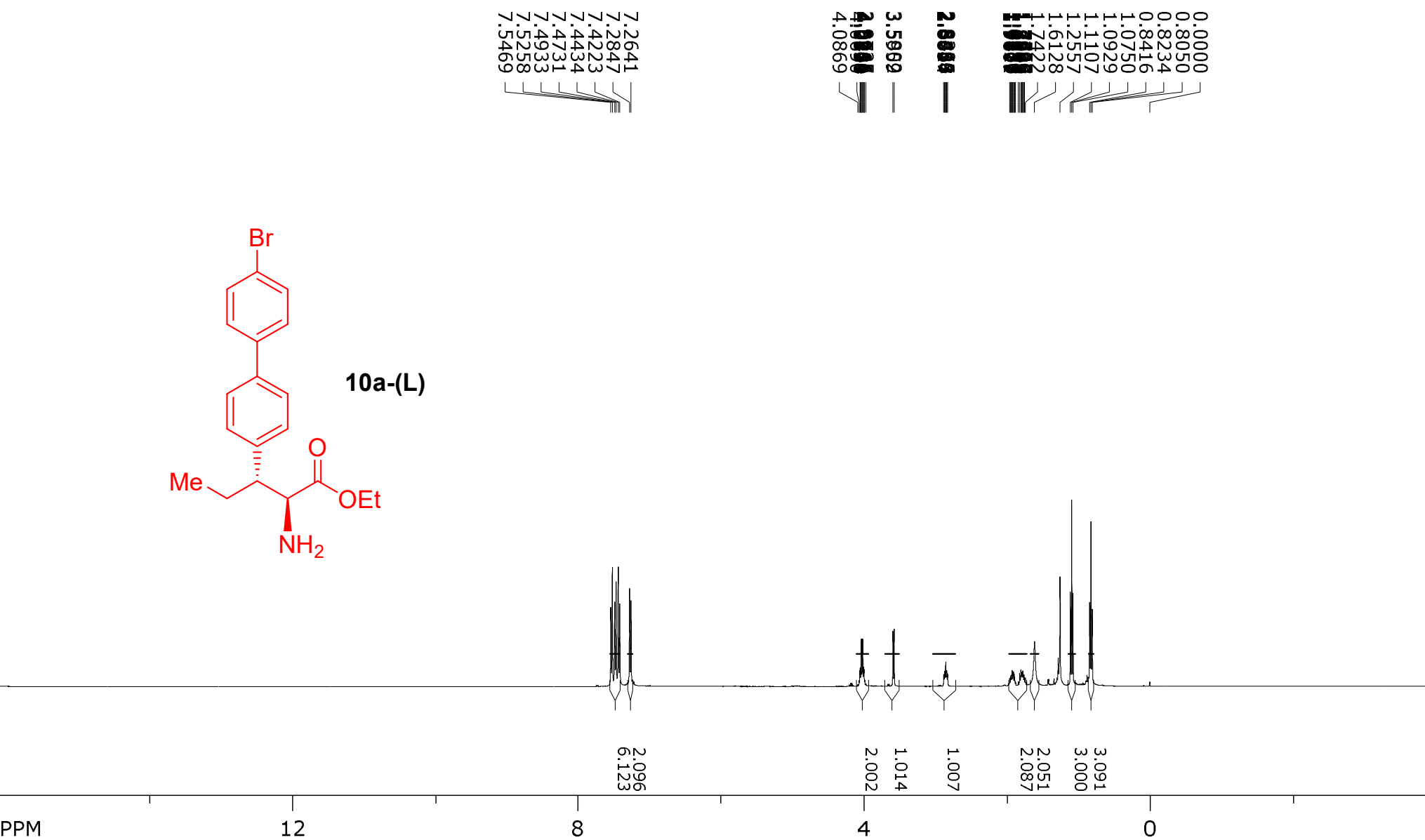
3.5196
3.5352

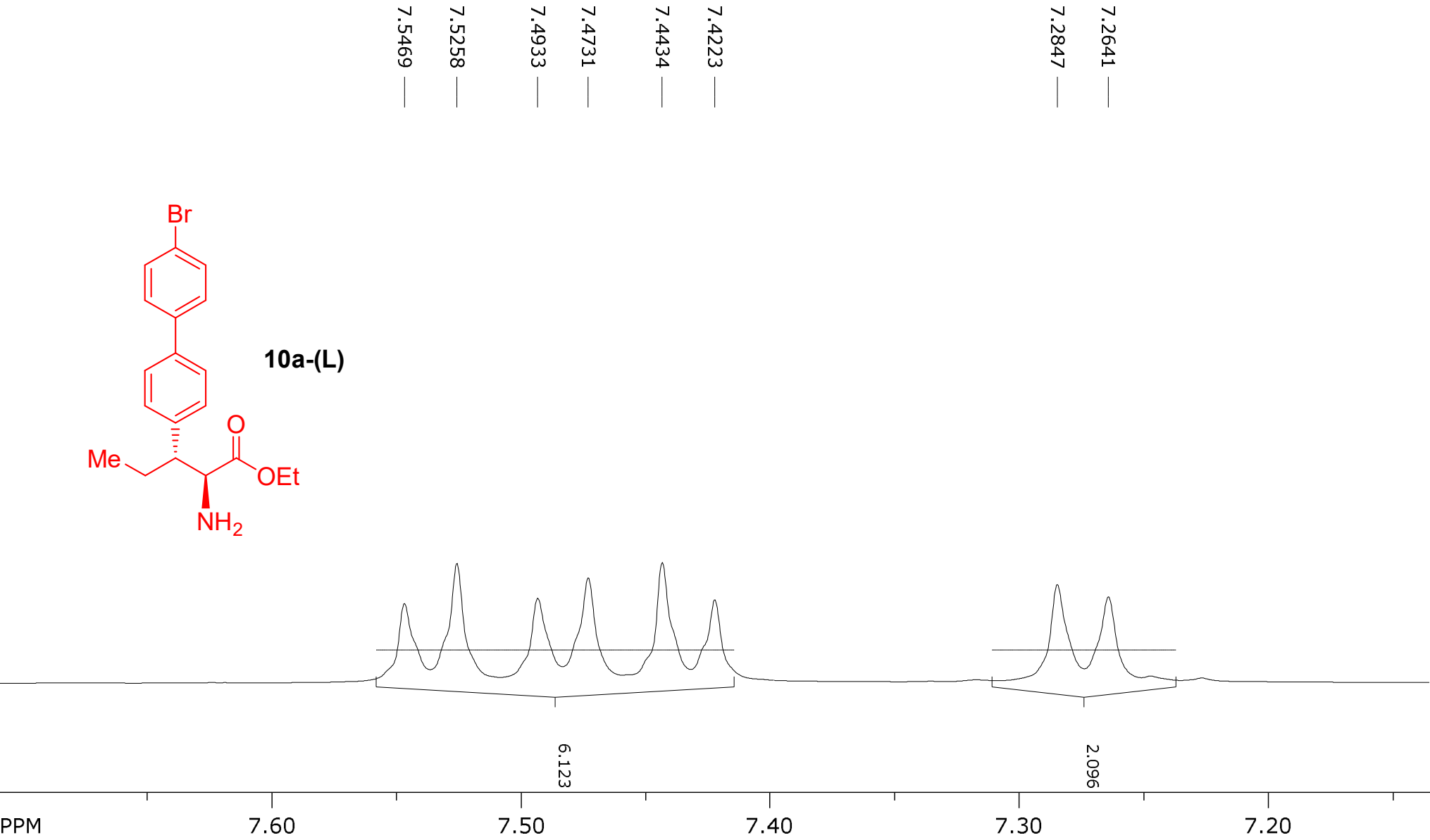
2.7669
2.7815
2.7935
2.8084
2.8205





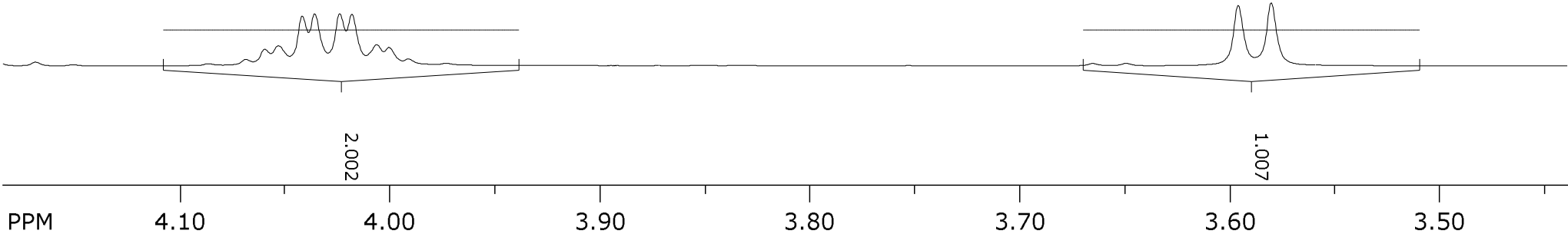
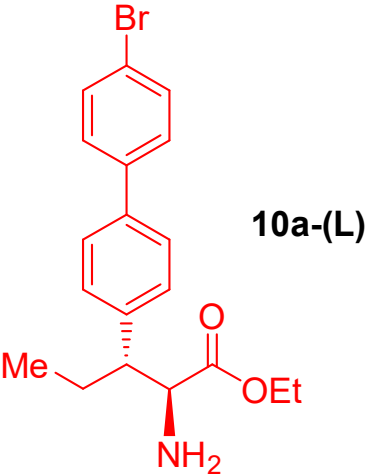






3.9735
3.9915
4.0006
4.0066
4.0184
4.0242
4.0361
4.0420
4.0534
4.0598
4.0690
4.0869

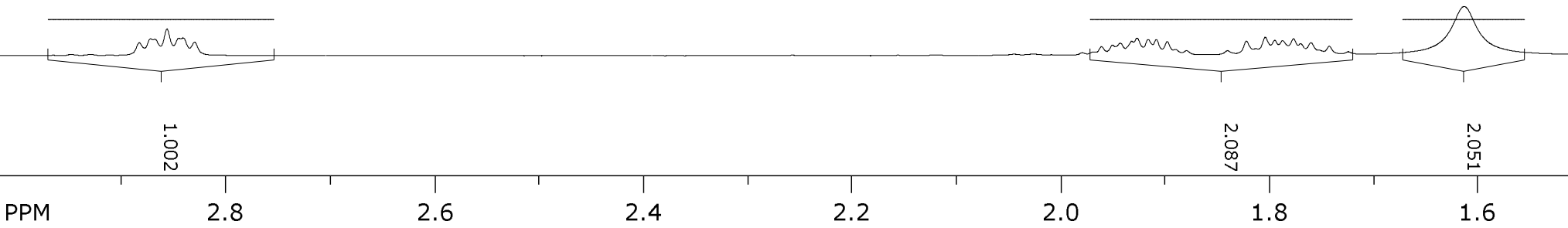
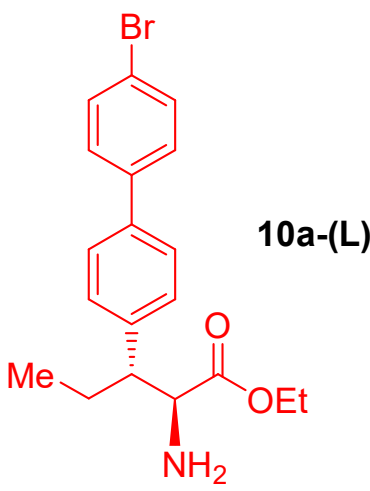
3.5802
3.5959

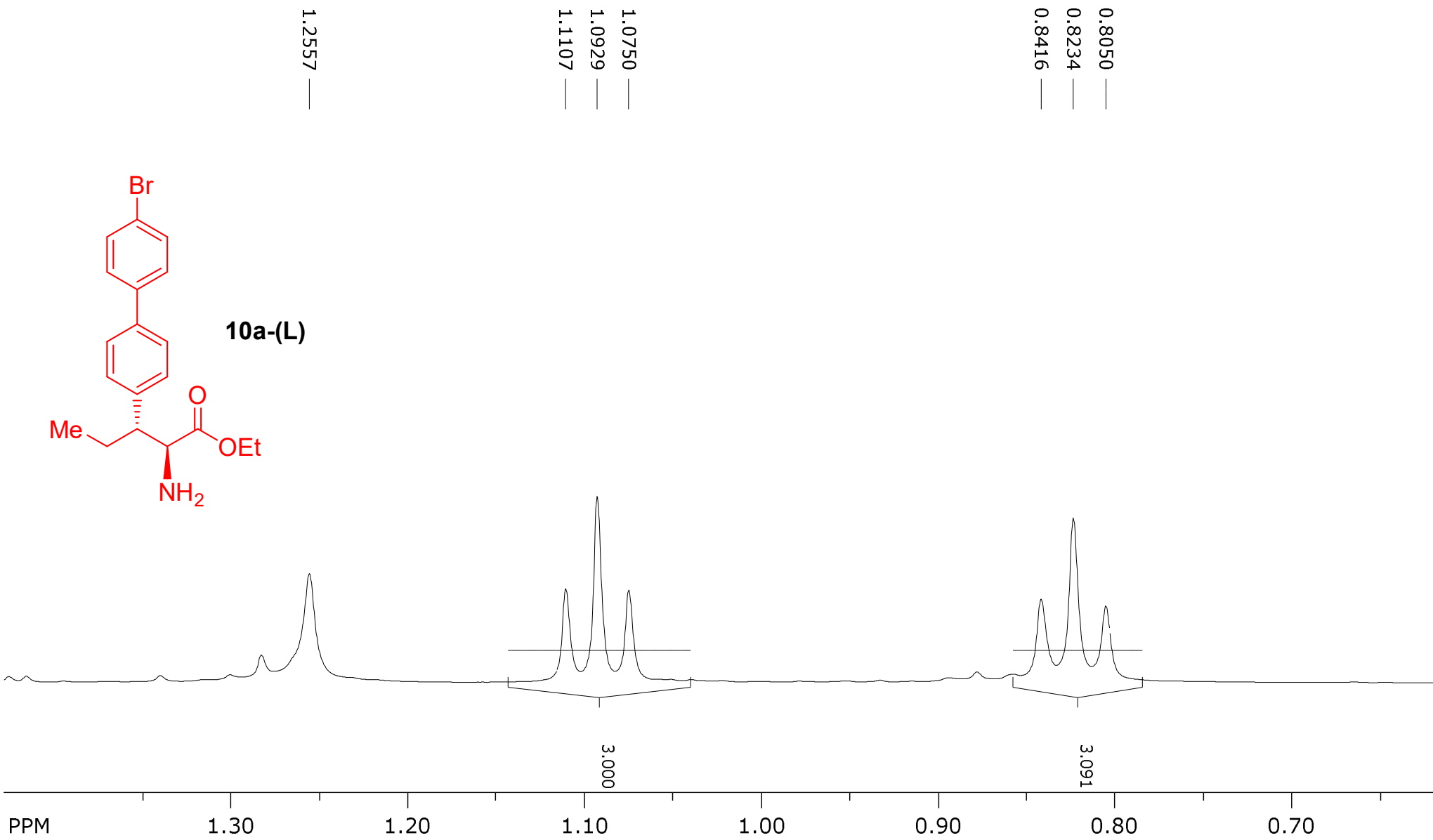


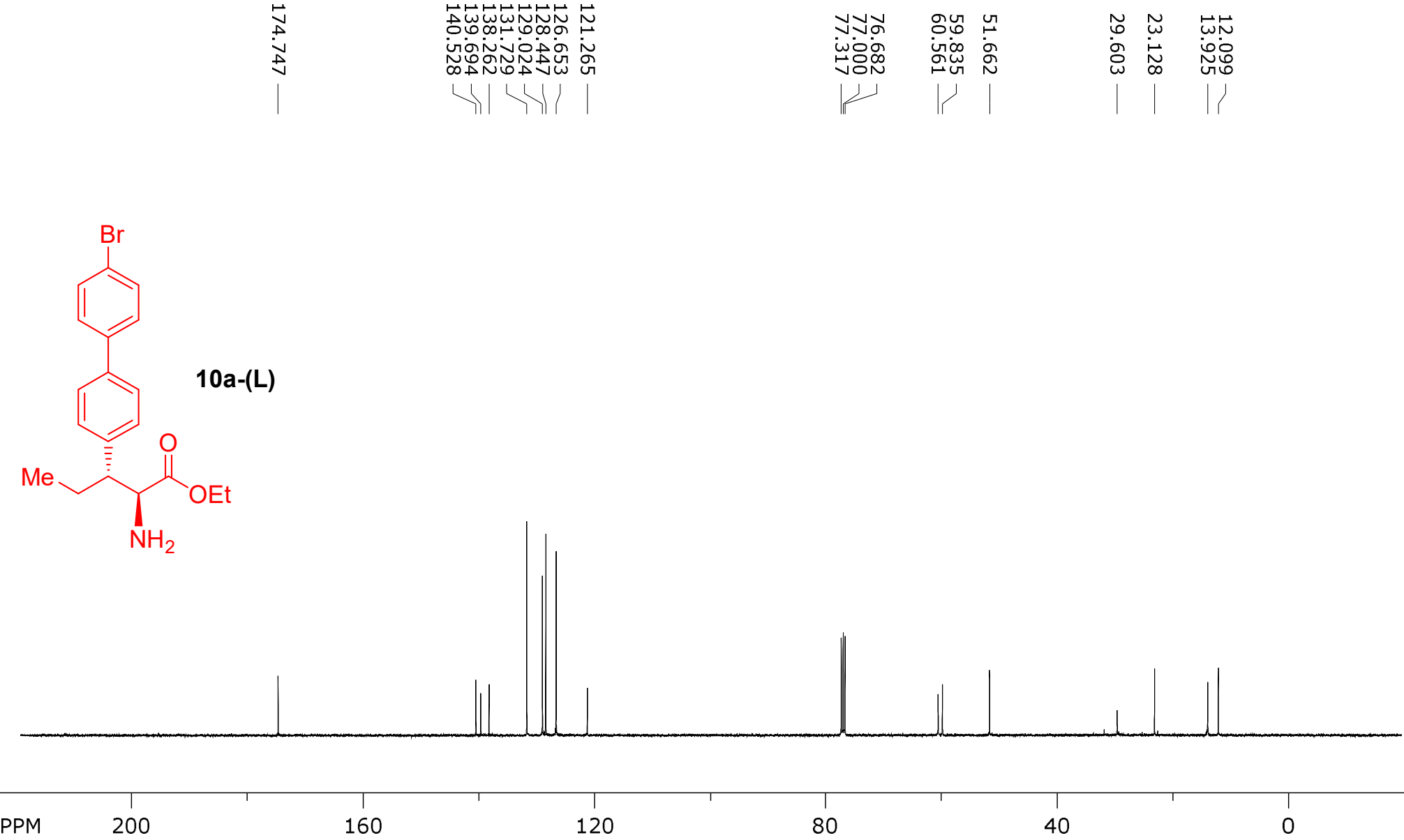
2.8304
2.8413
2.8569
2.8727
2.8834

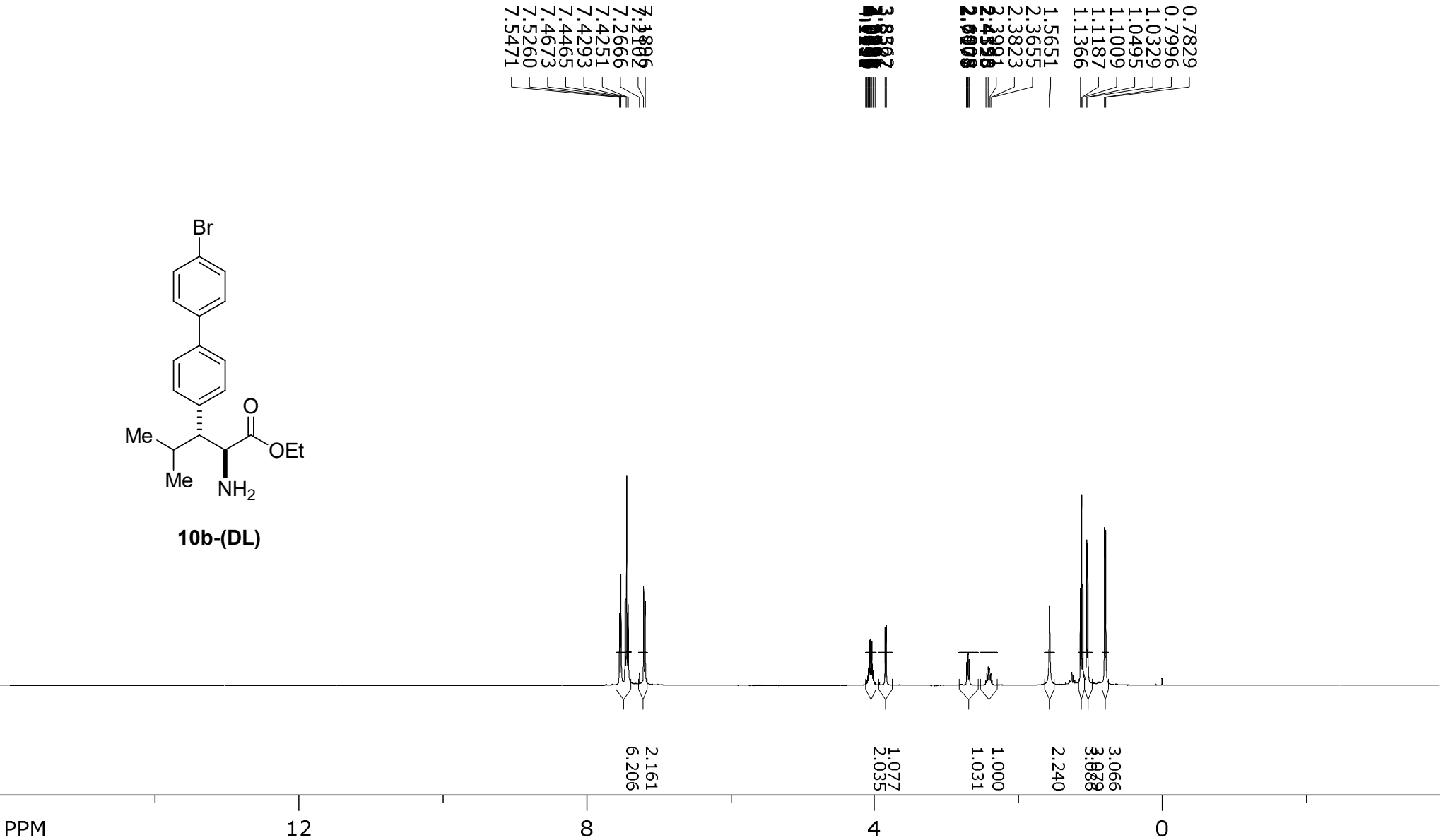
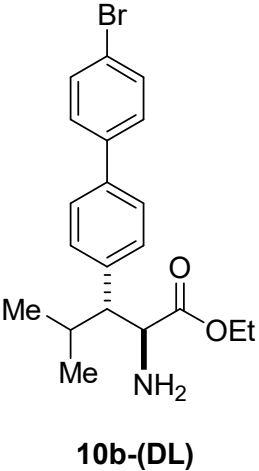
1.7422
1.7597
1.7765
1.7869
1.8036
1.8217
1.8398
1.8791
1.8976
1.9080
1.9159
1.9266
1.9425
1.9607

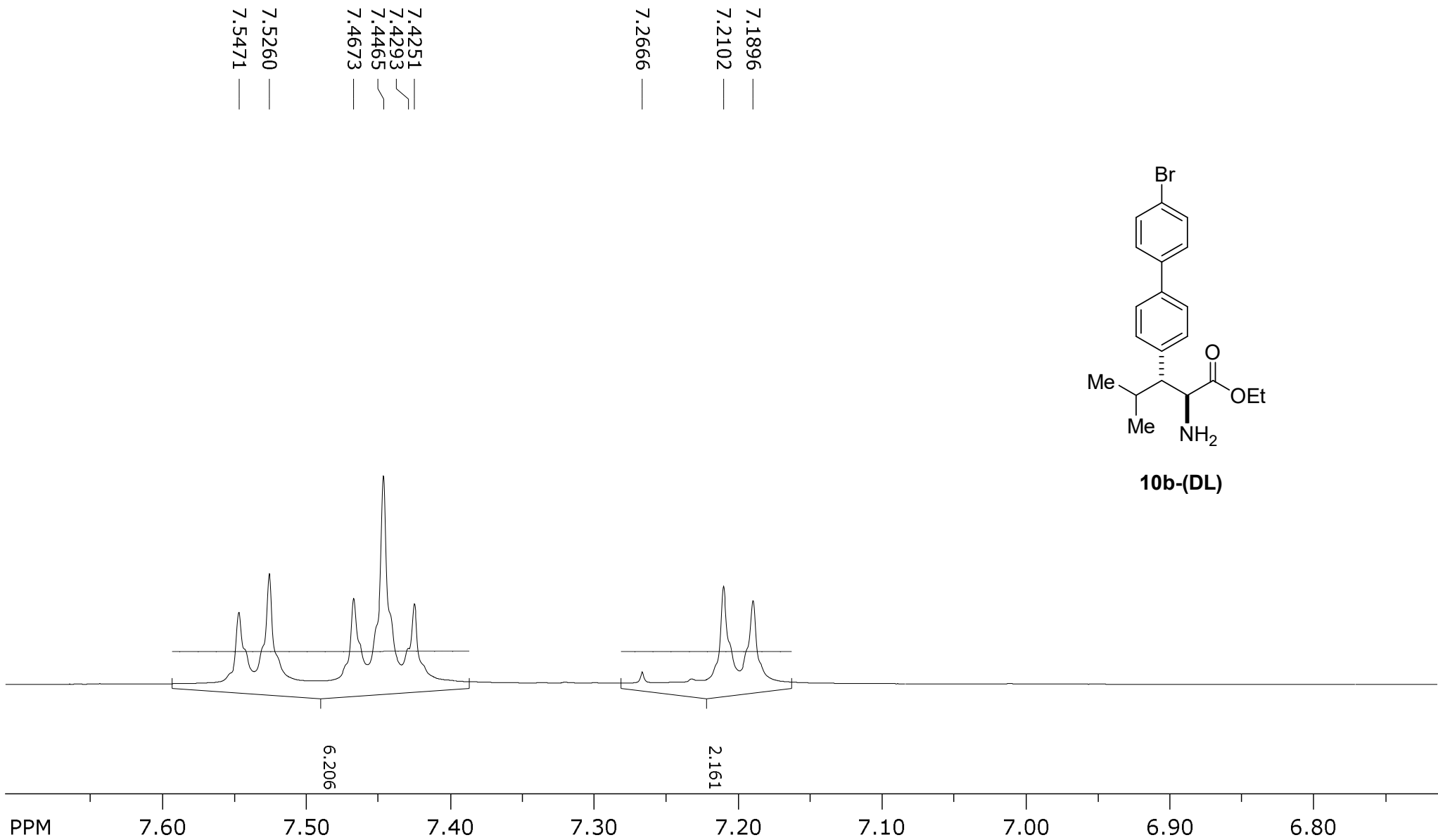
1.6128









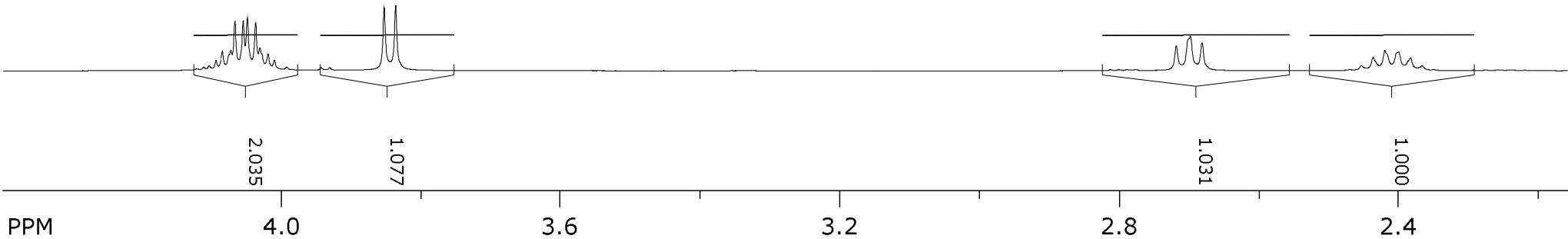
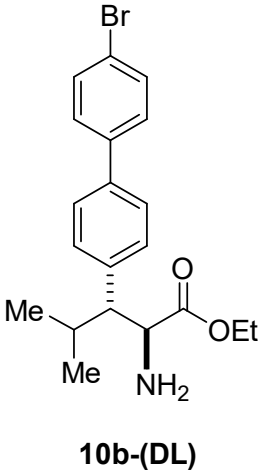


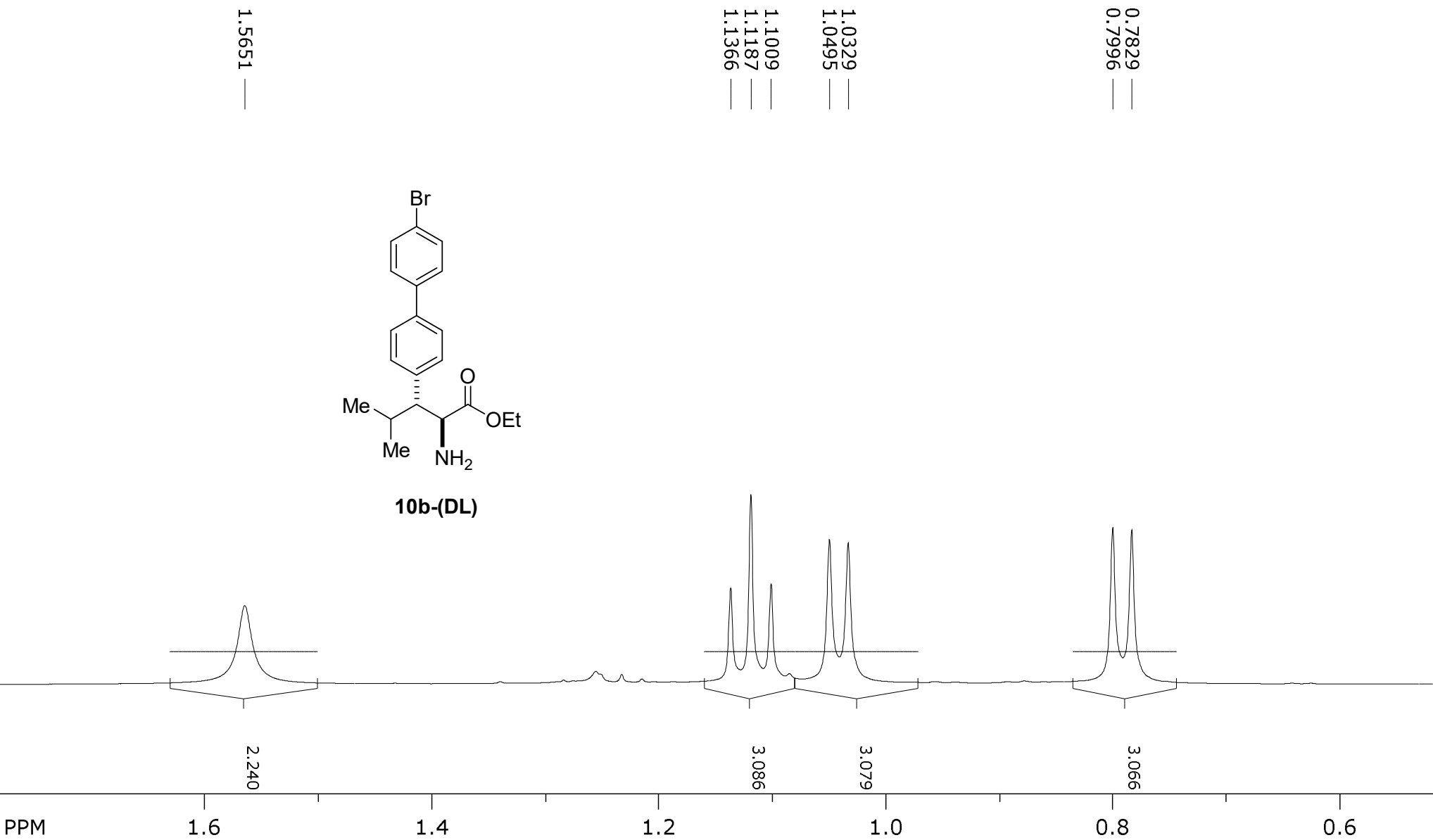
3.9921
4.0099
4.0191
4.0368
4.0487
4.0546
4.0666
4.0749
4.0846
4.0935
4.1033
4.1113
4.1211

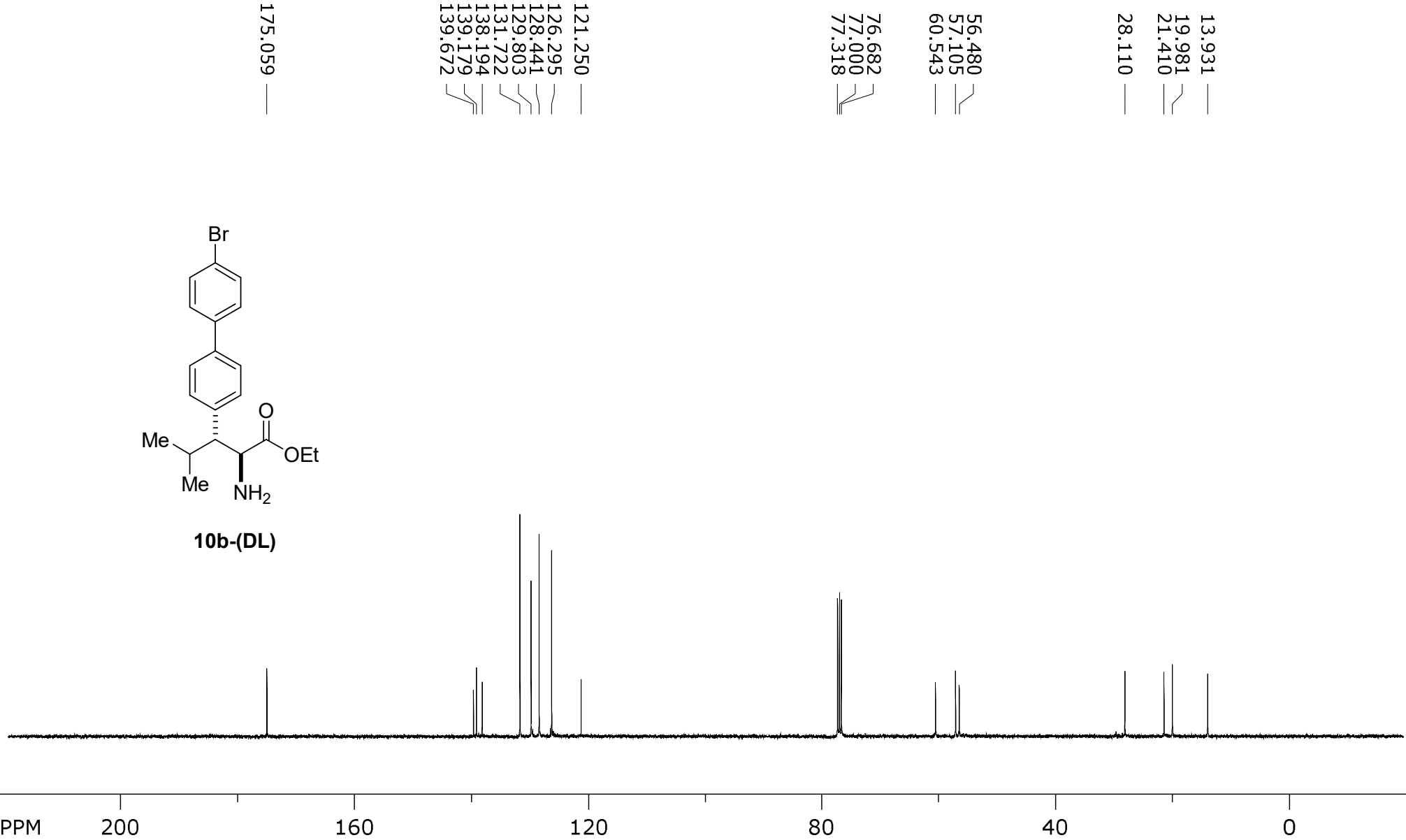
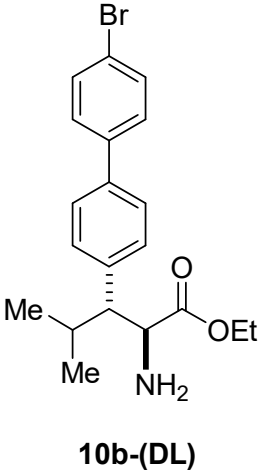
3.8362
3.8527

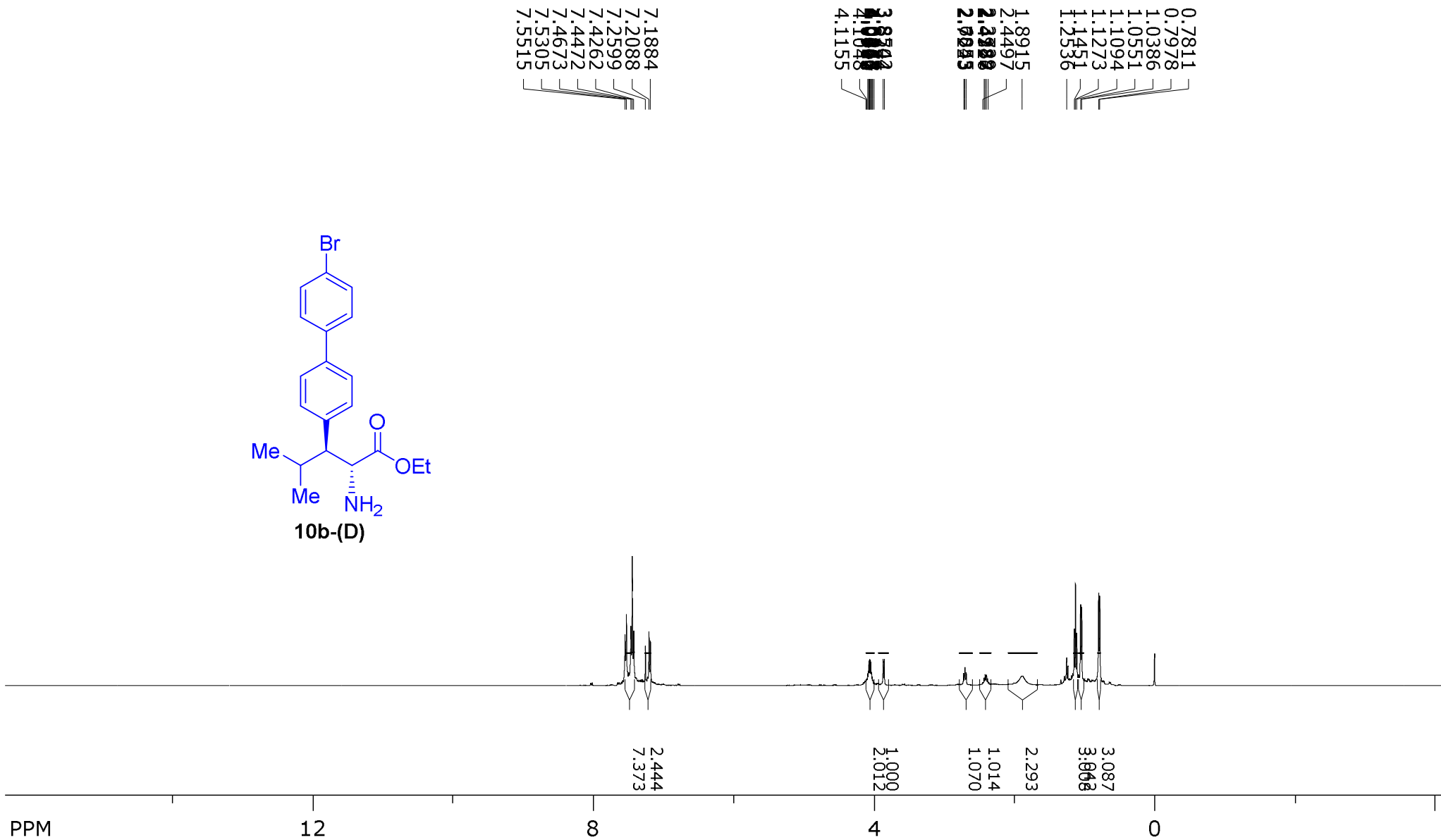
2.6808
2.6977
2.7005
2.7178

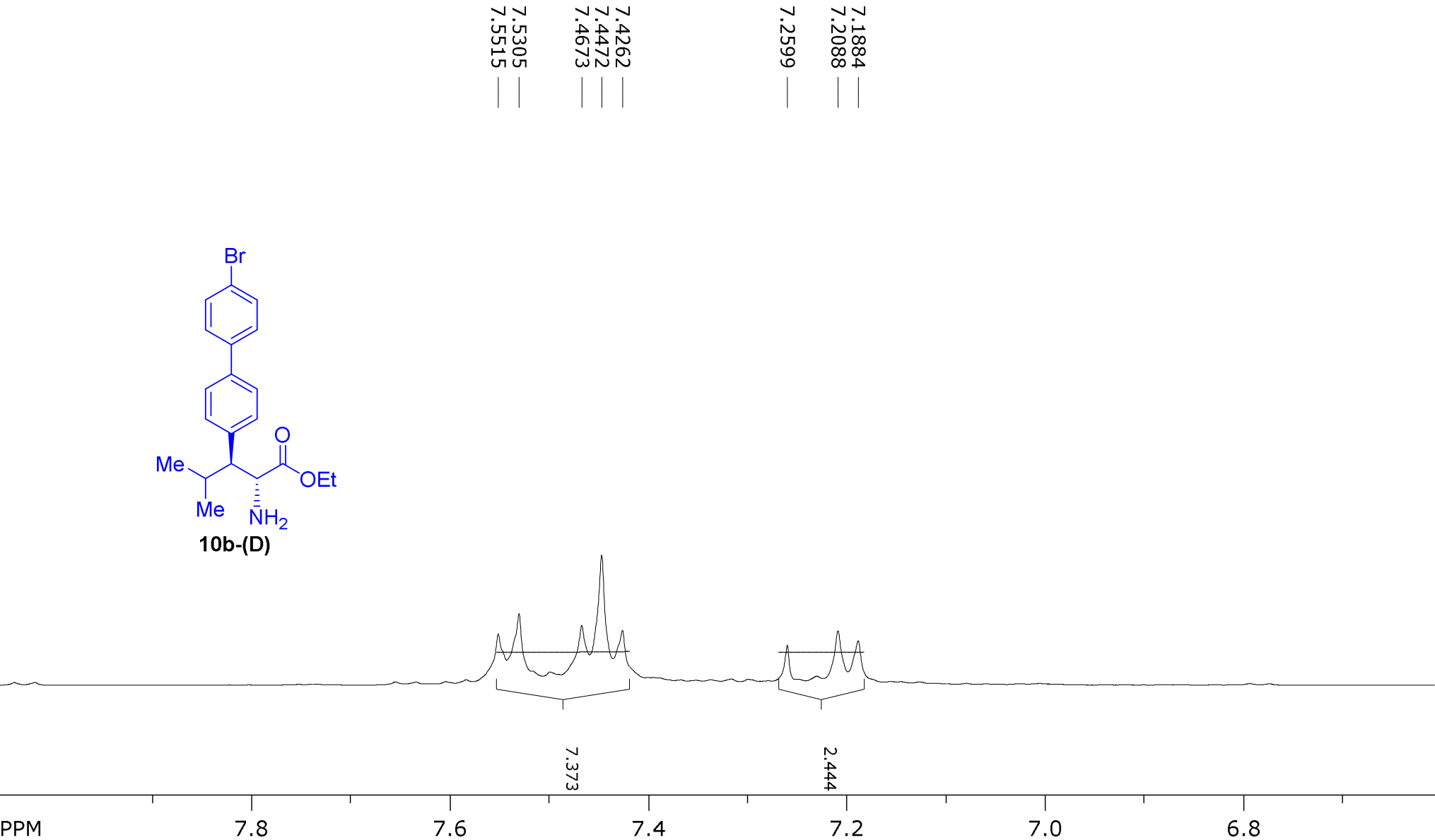
2.3655
2.3823
2.3991
2.4190
2.4358
2.4525





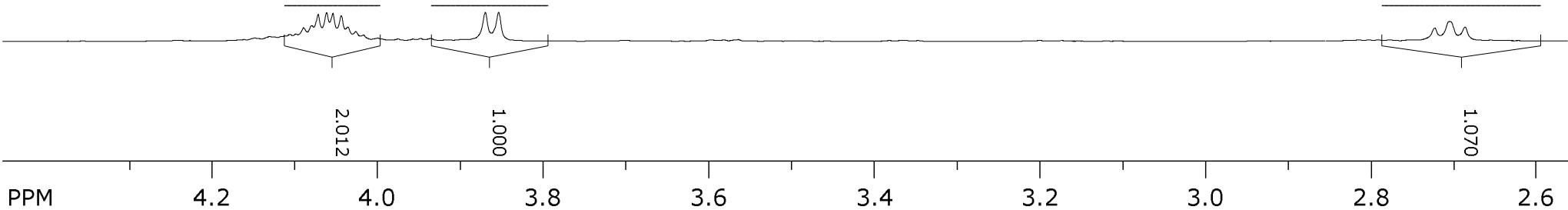
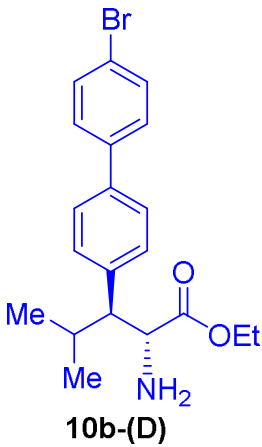


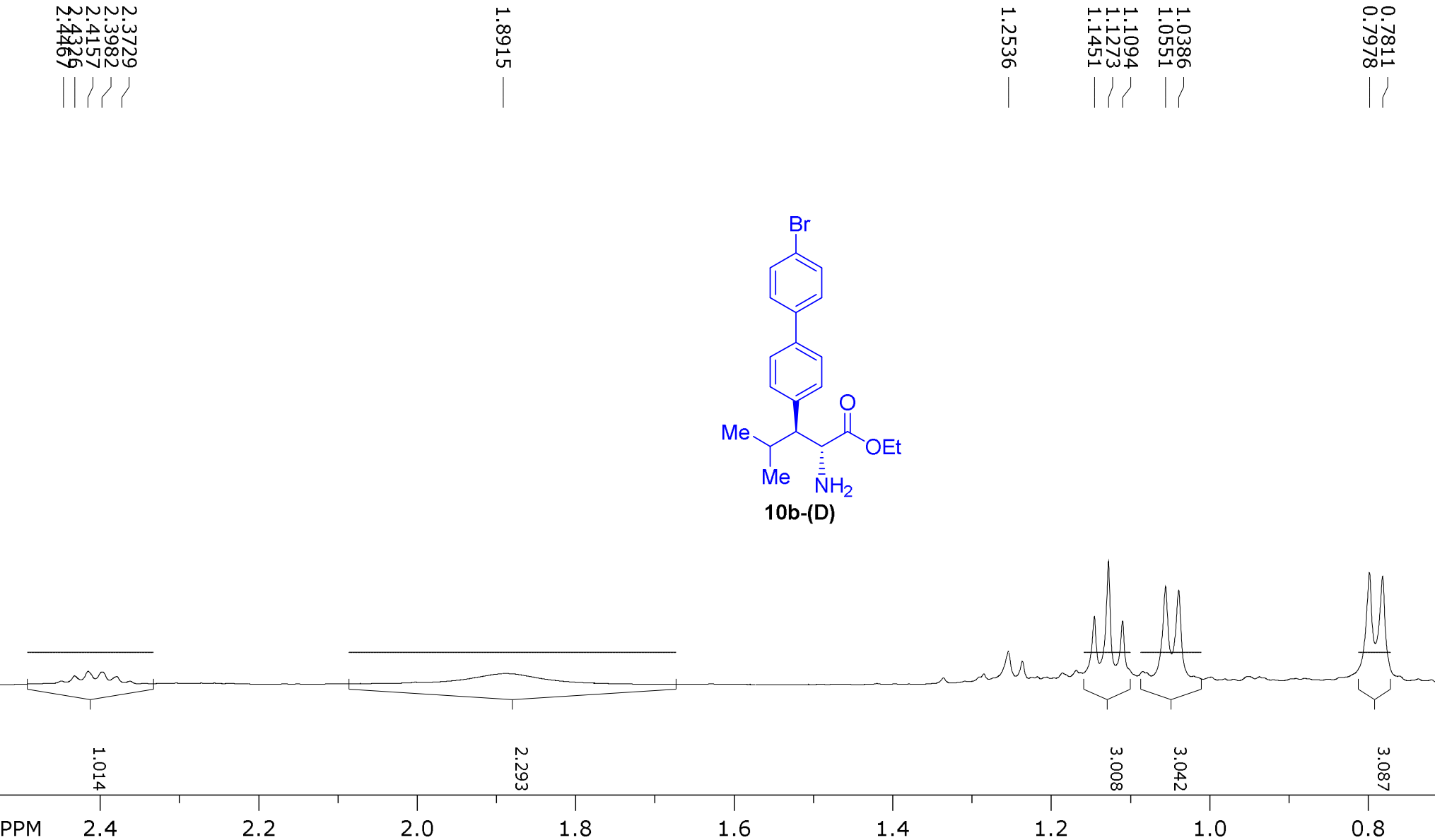


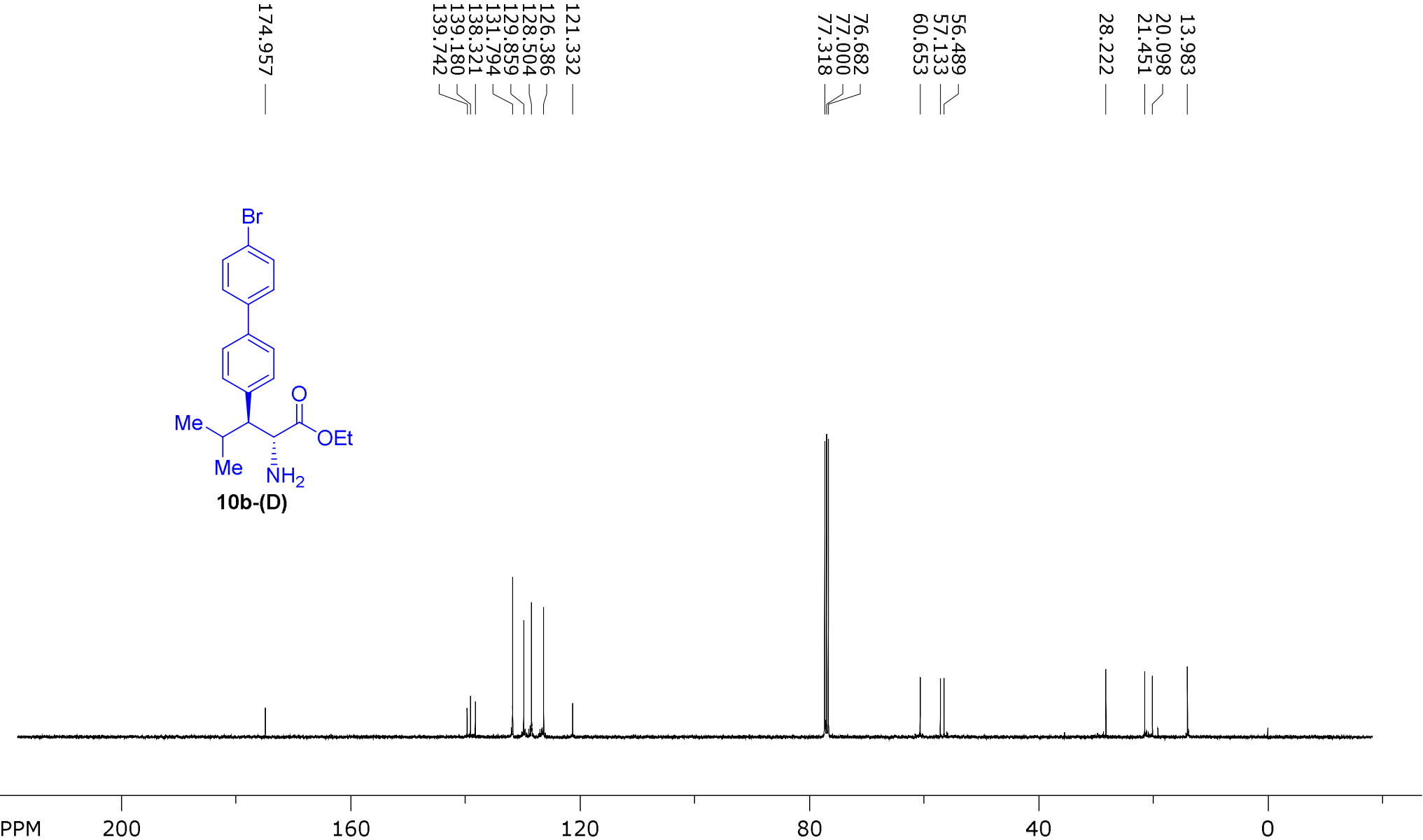


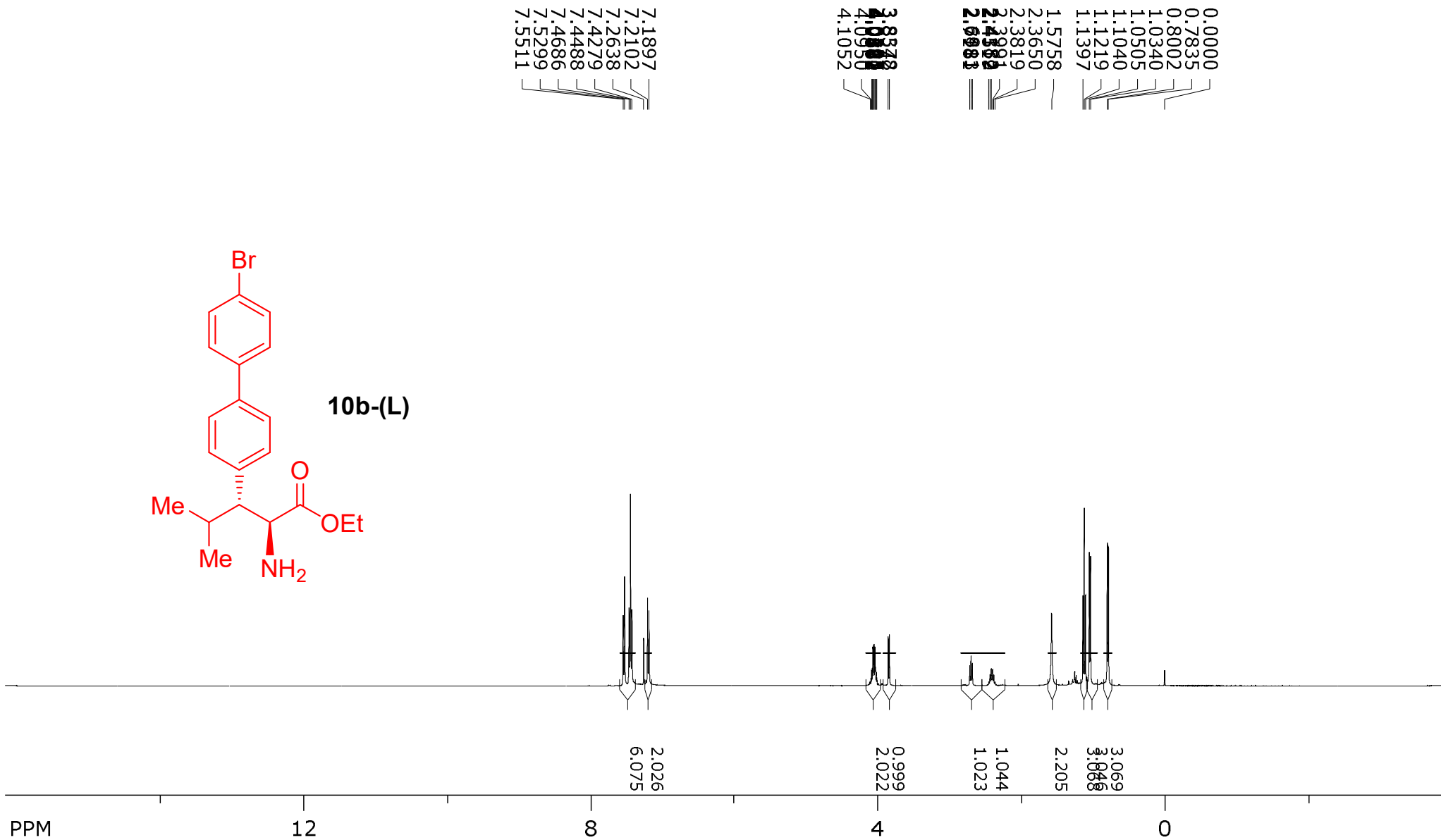
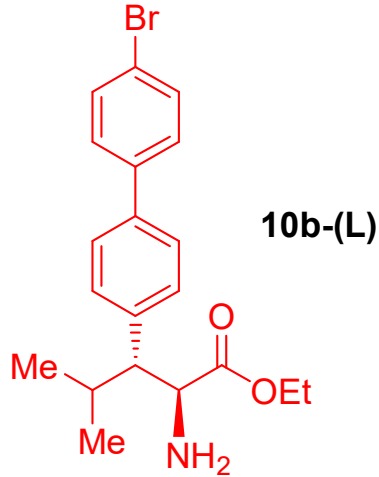
4.0024
4.0178
4.0268
4.0367
4.0445
4.0547
4.0623
4.0726
4.0802
4.0900
4.1048
4.1155
3.8542
3.8704

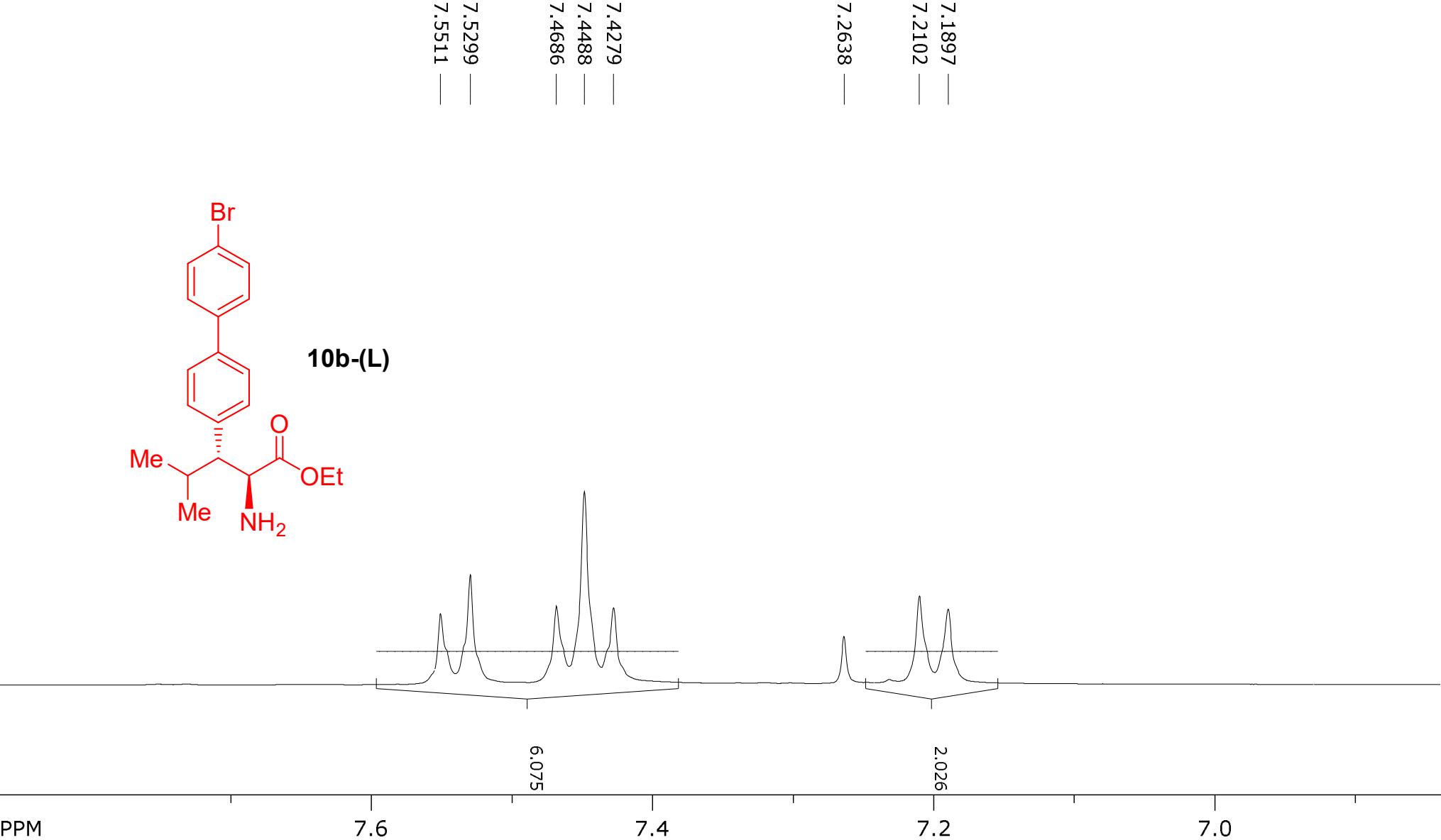
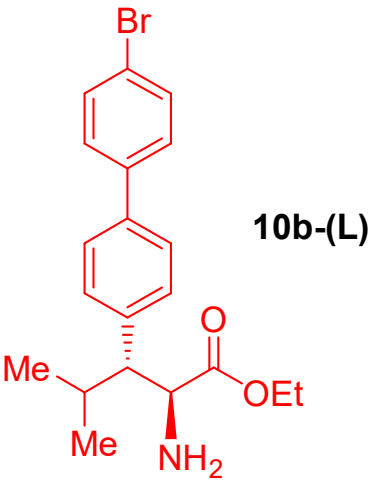
2.6855
2.7043
2.7223

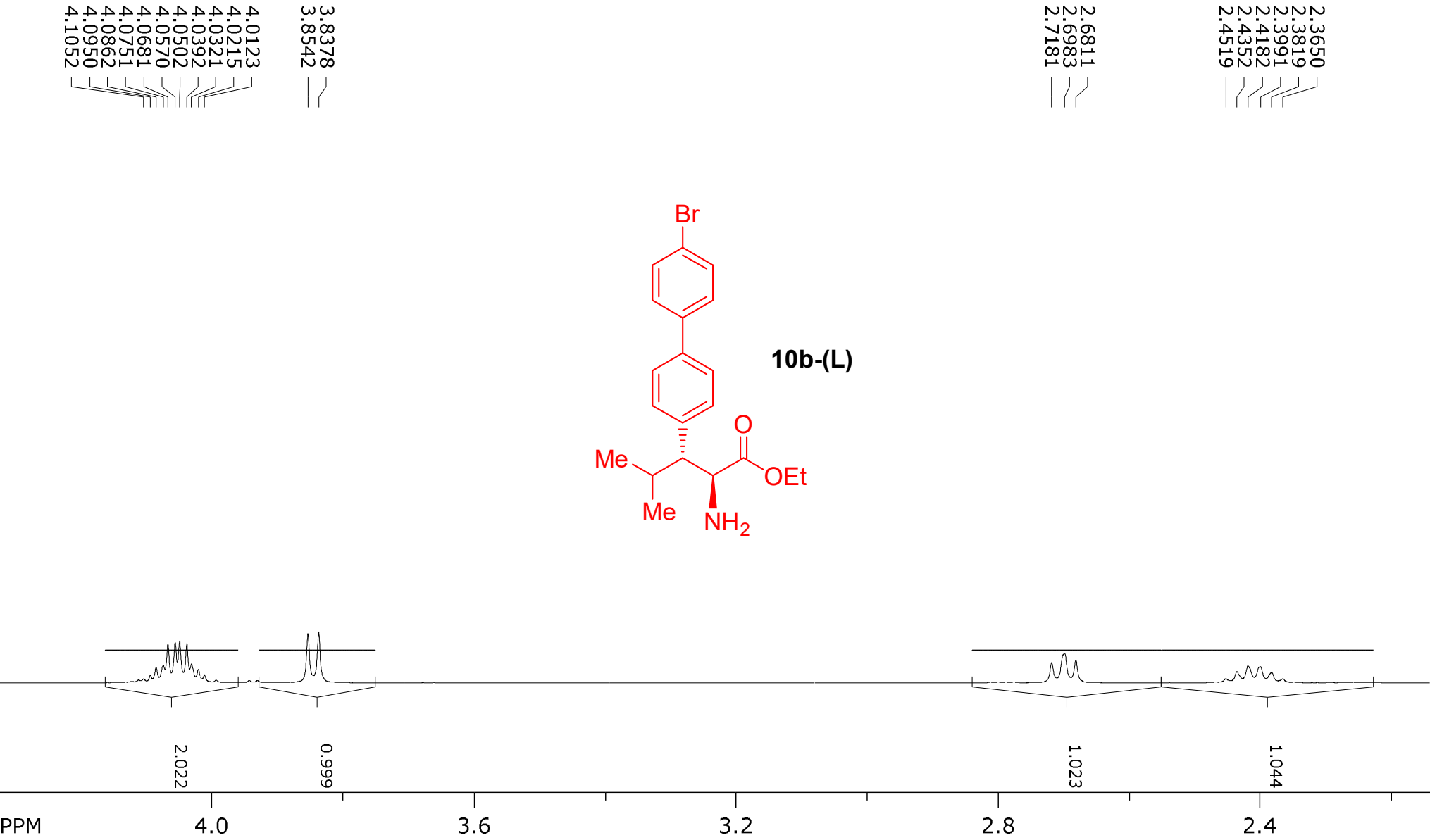


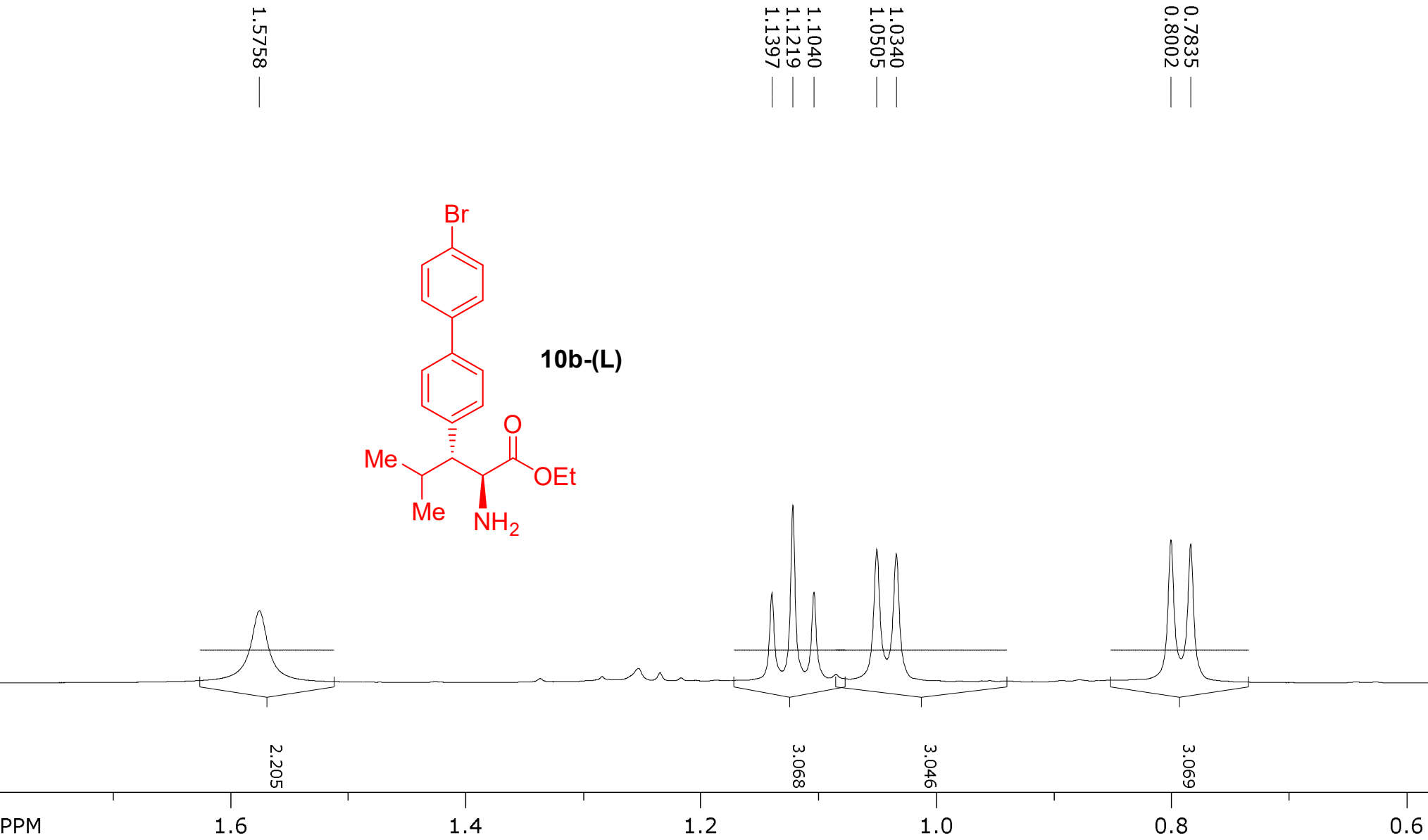


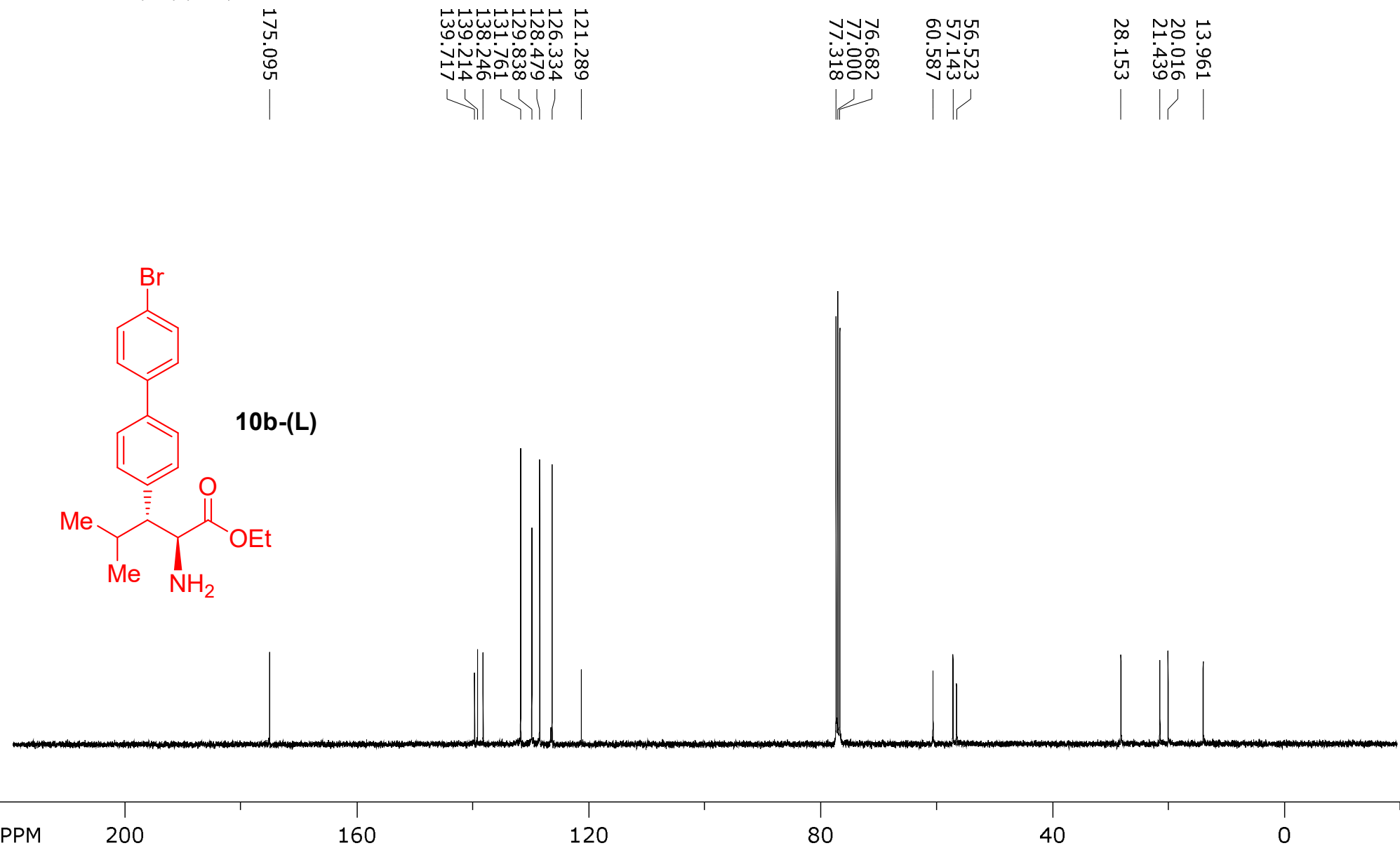






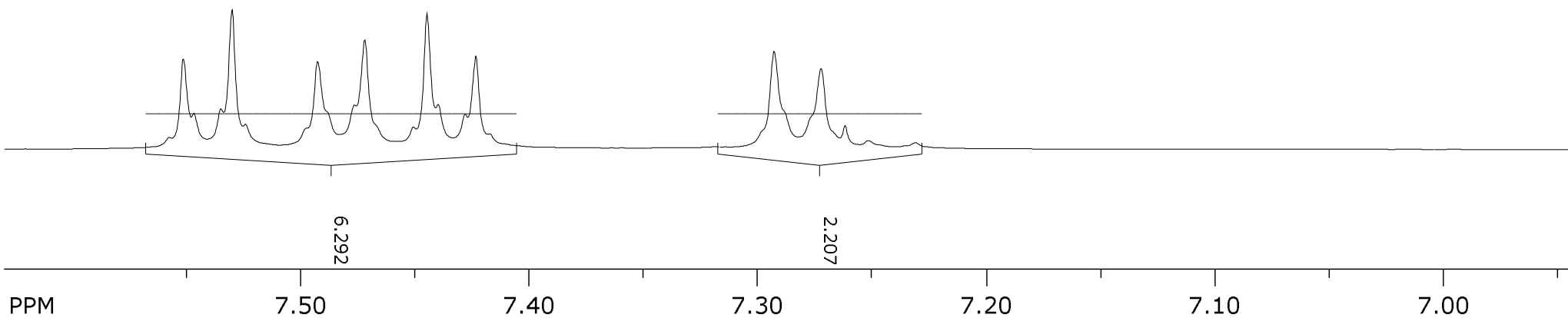
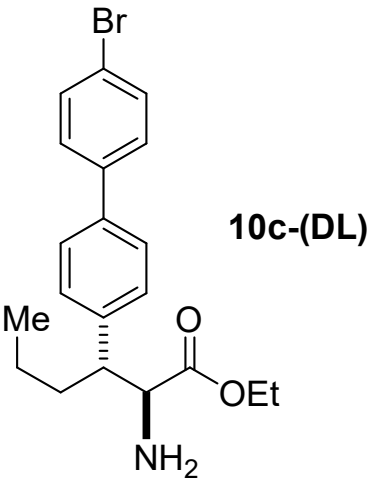


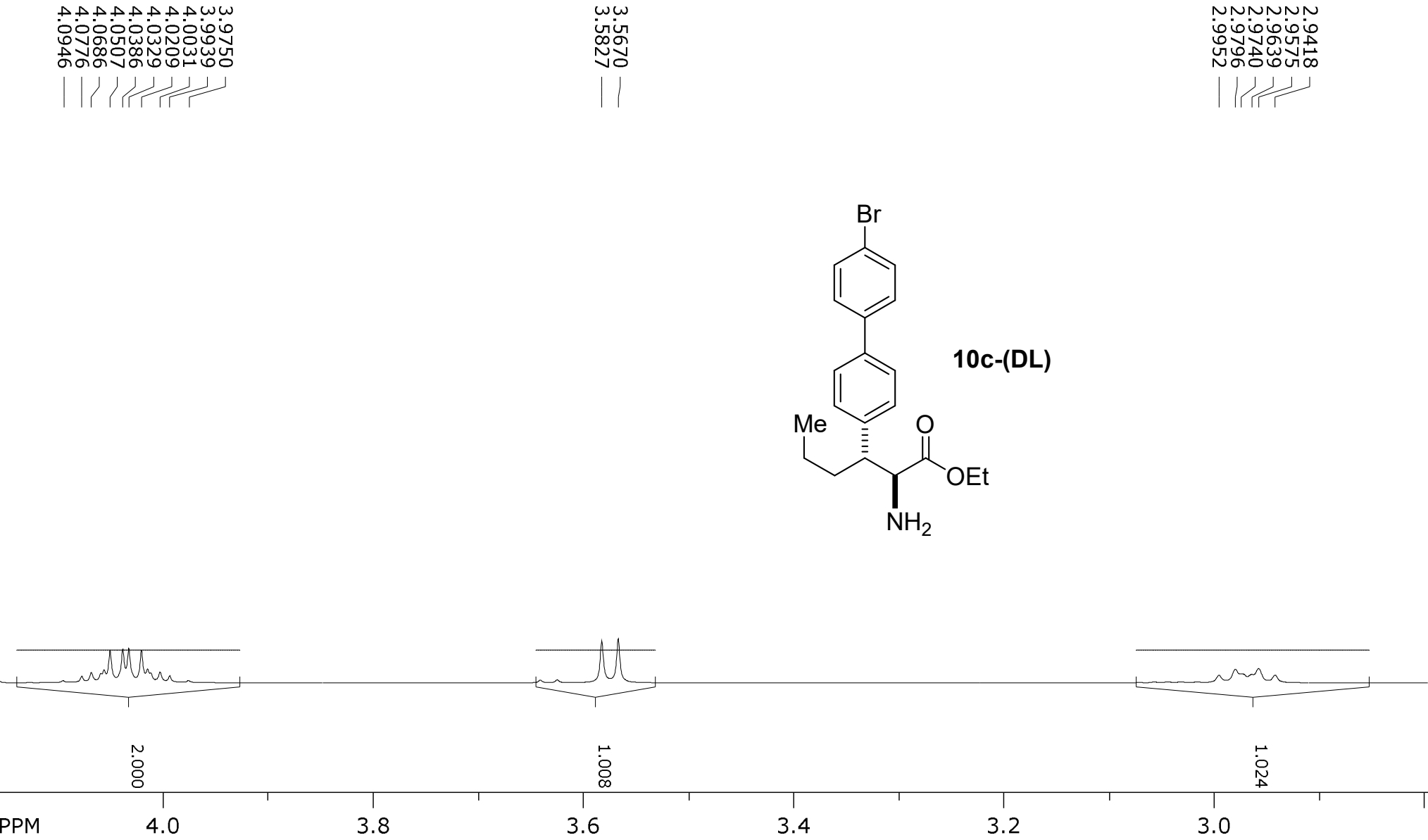




7.4172 —
7.4233 —
7.4280 —
7.4398 —
7.4447 —
7.4506 —
7.4719 —
7.4764 —
7.4925 —
7.5241 —
7.5300 —
7.5349 —
7.5467 —
7.5514 —

7.2314 —
7.2516 —
7.2617 —
7.2722 —
7.2927 —



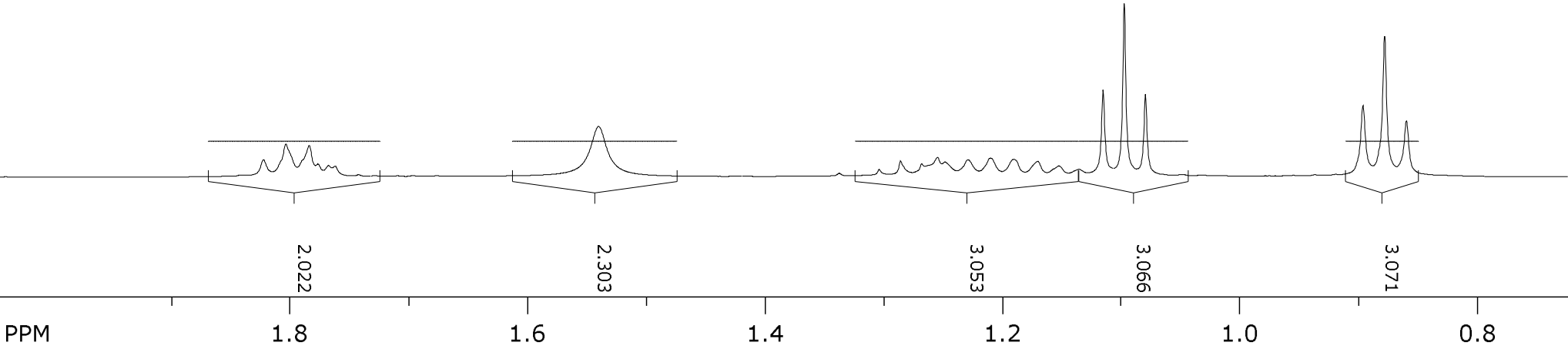
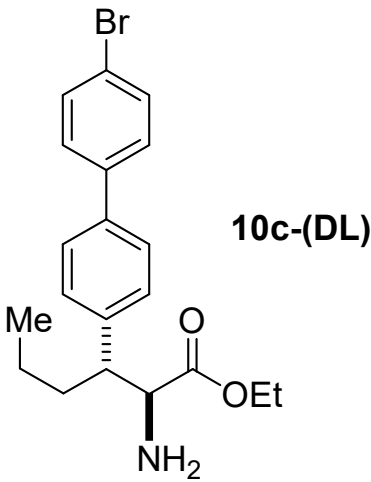


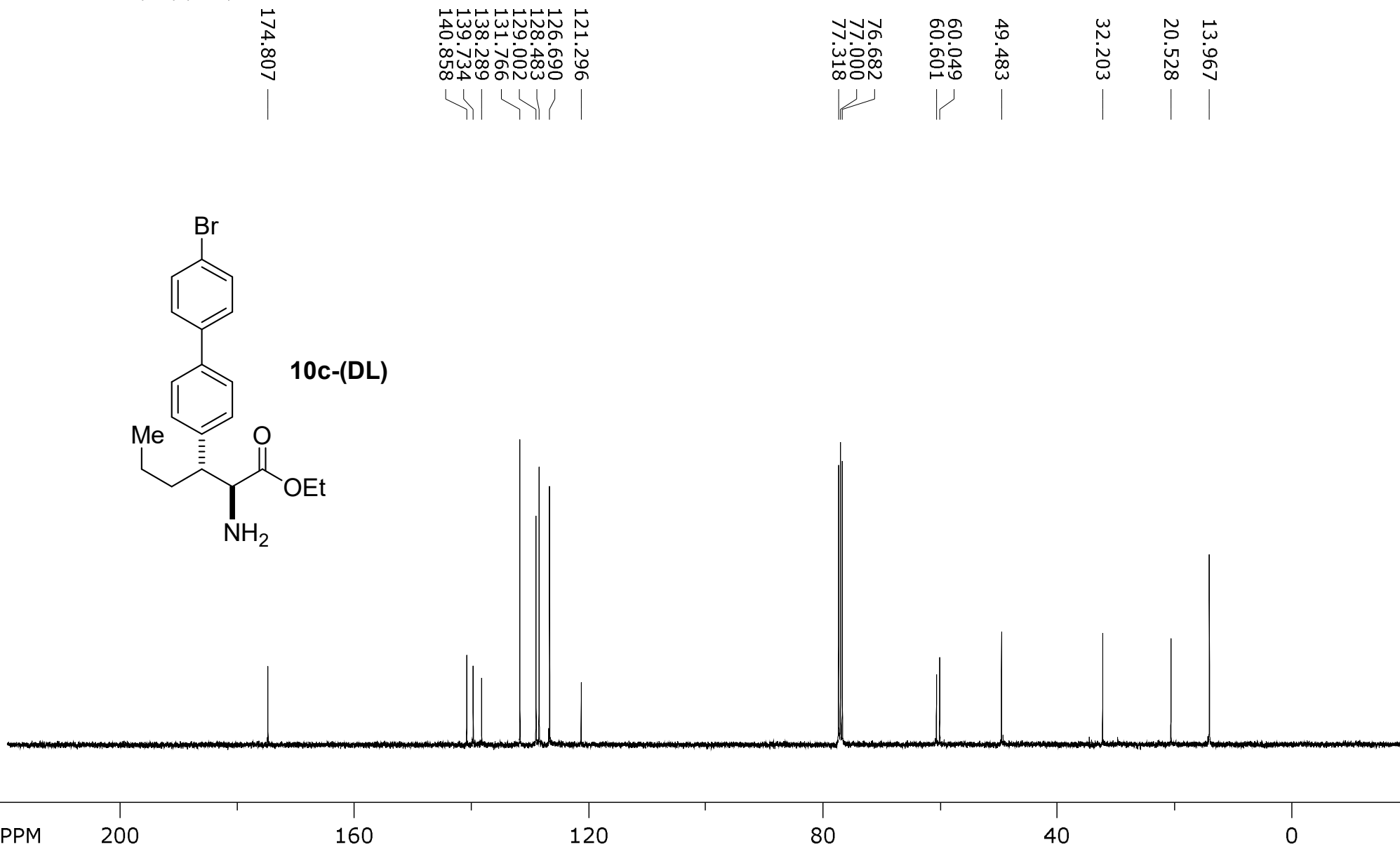
1.0795
1.0974
1.1152
1.1355
1.1527
1.1702
1.1906
1.2101
1.2292
1.2485
1.2680
1.2860
1.3039

0.8595
0.8779
0.8961

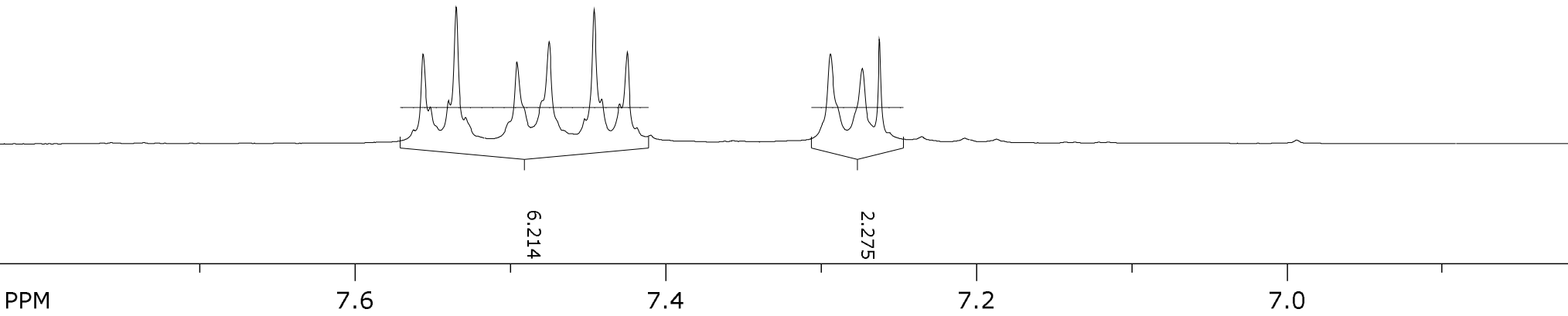
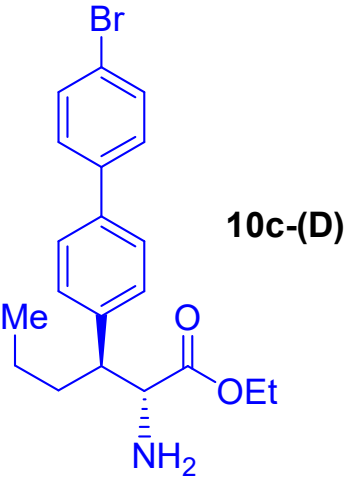
1.5405

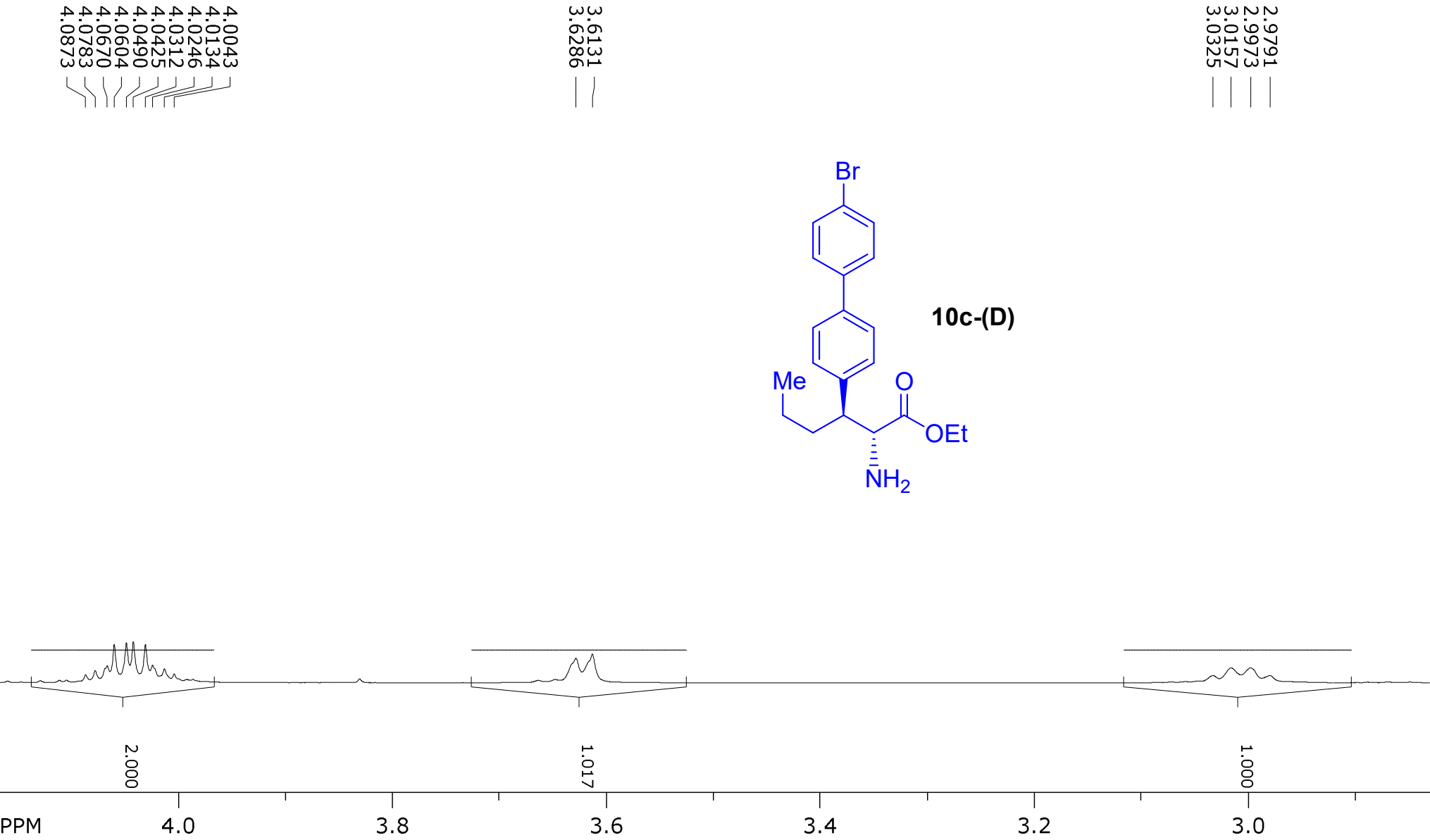
1.7627
1.7845
1.8042
1.8229

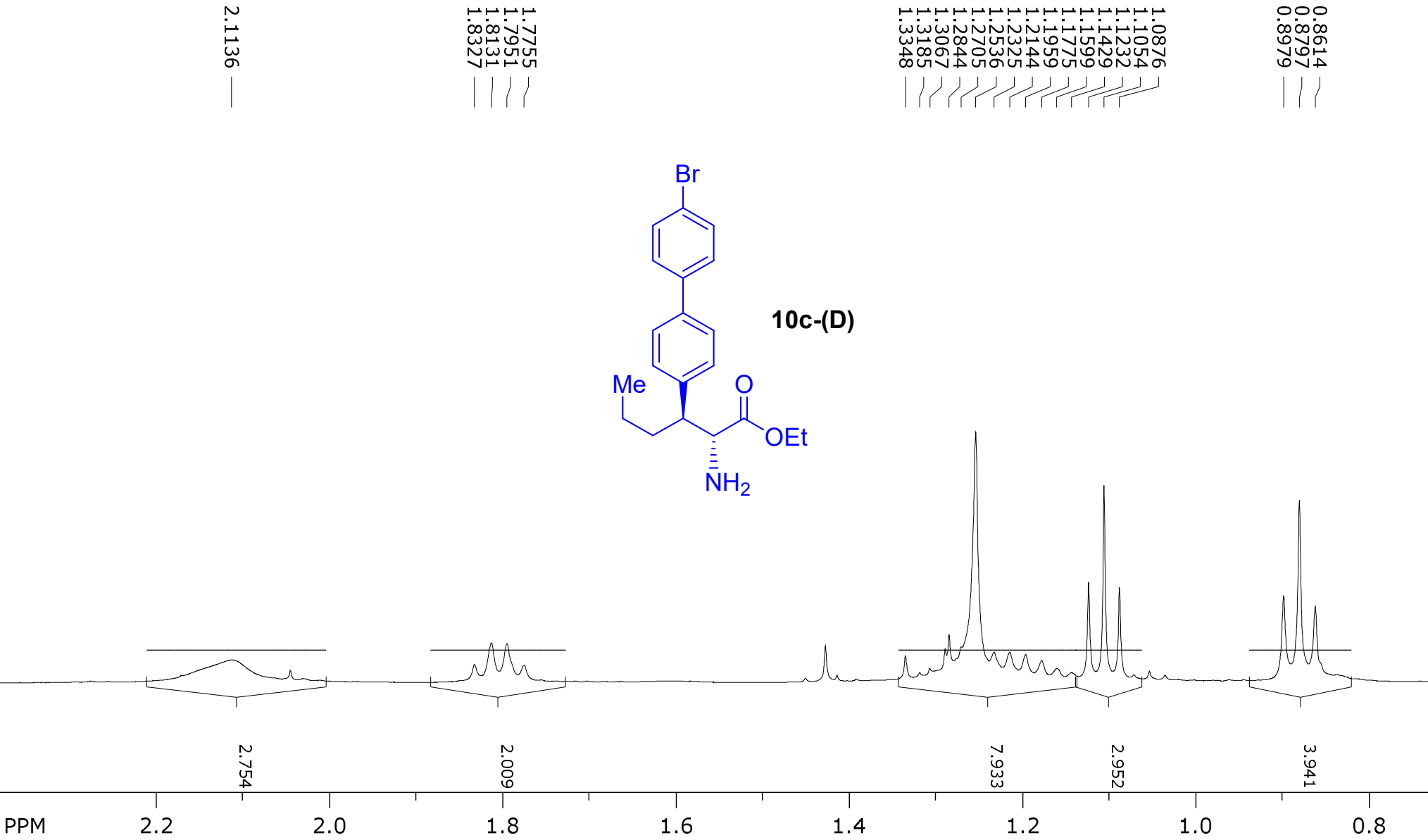


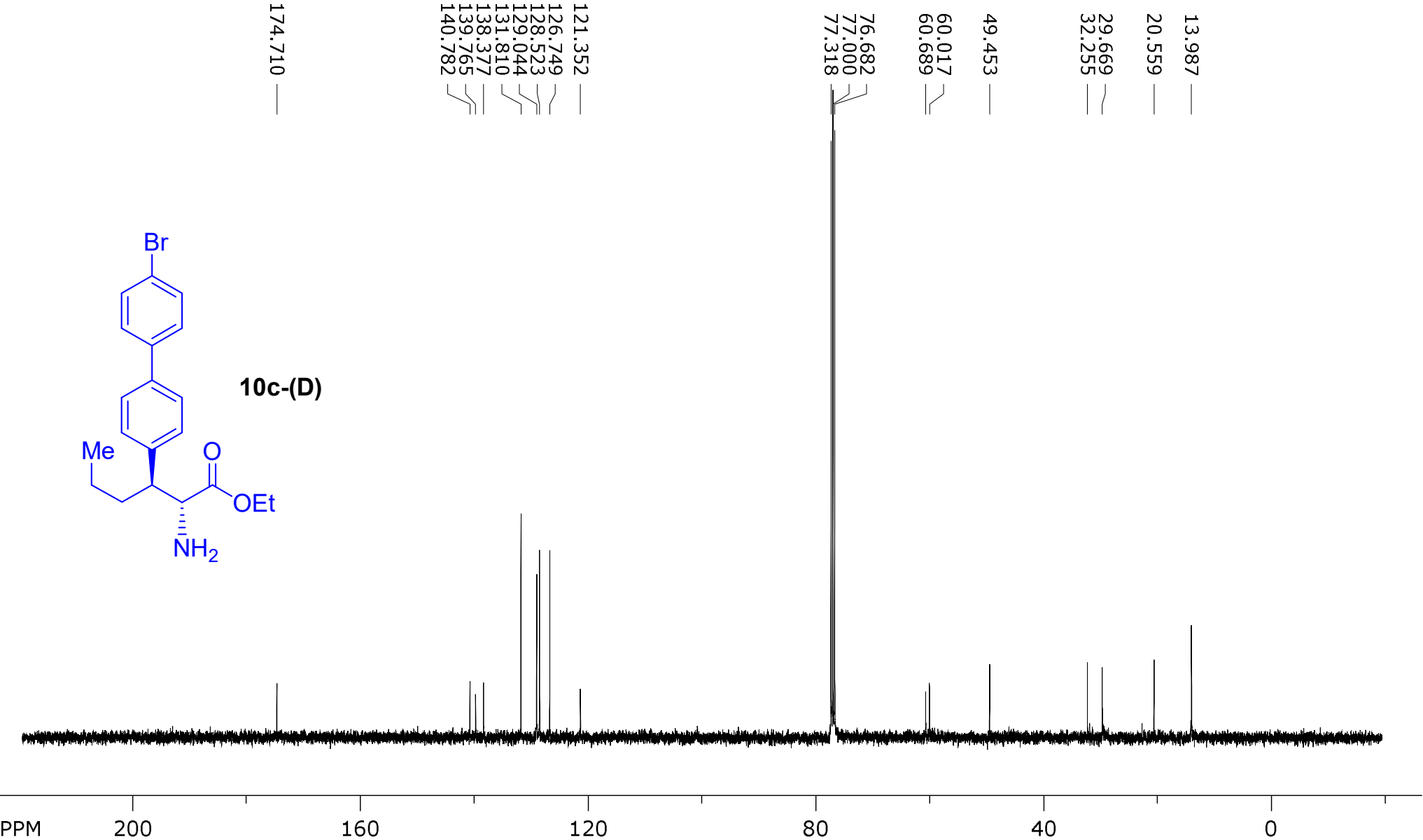


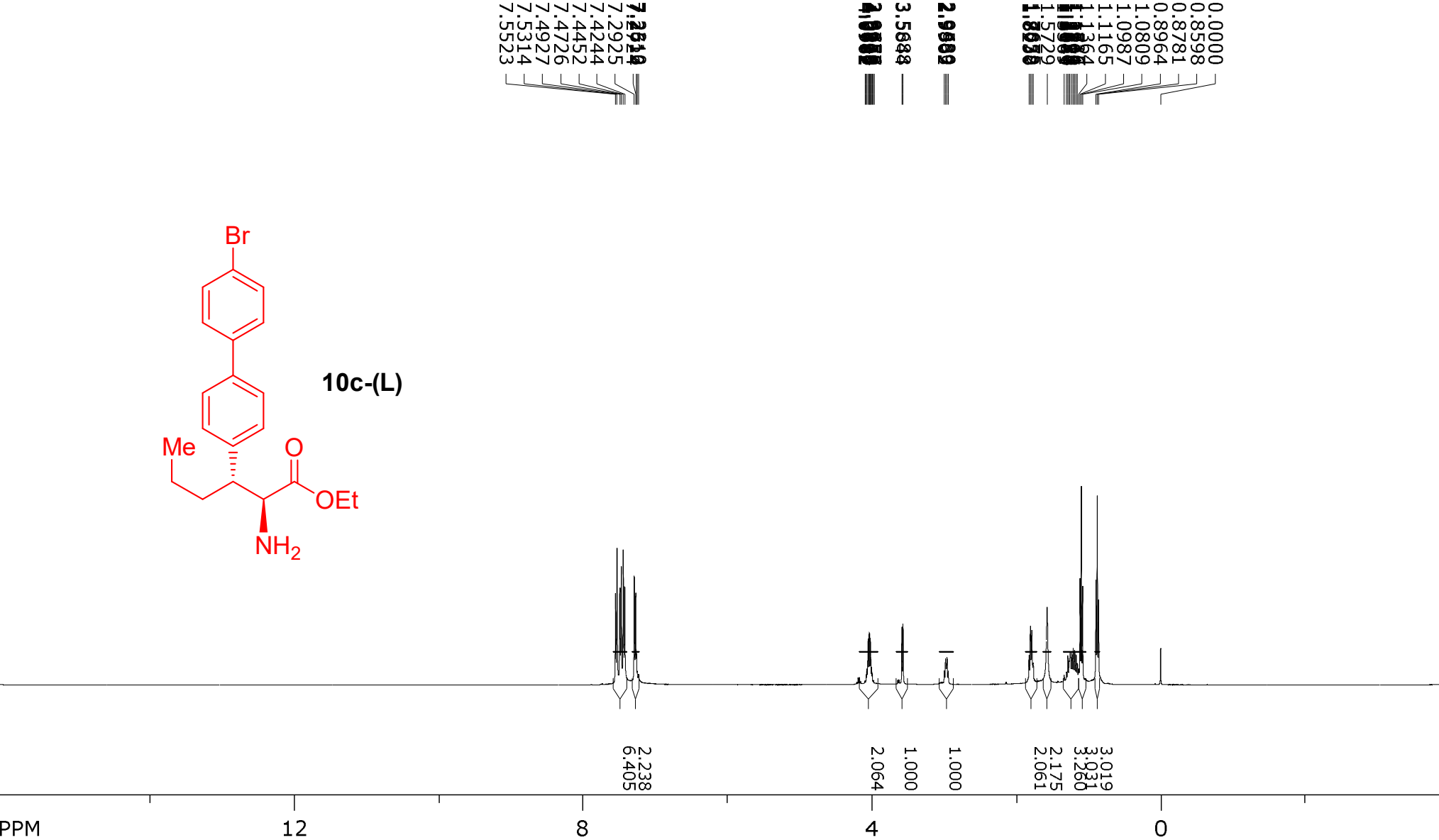
7.5291	—
7.5351	—
7.5401	—
7.5518	—
7.5565	—
7.4959	—
7.4753	—
7.4523	—
7.4463	—
7.4414	—
7.4297	—
7.4249	—
7.2940	—
7.2734	—
7.2623	—



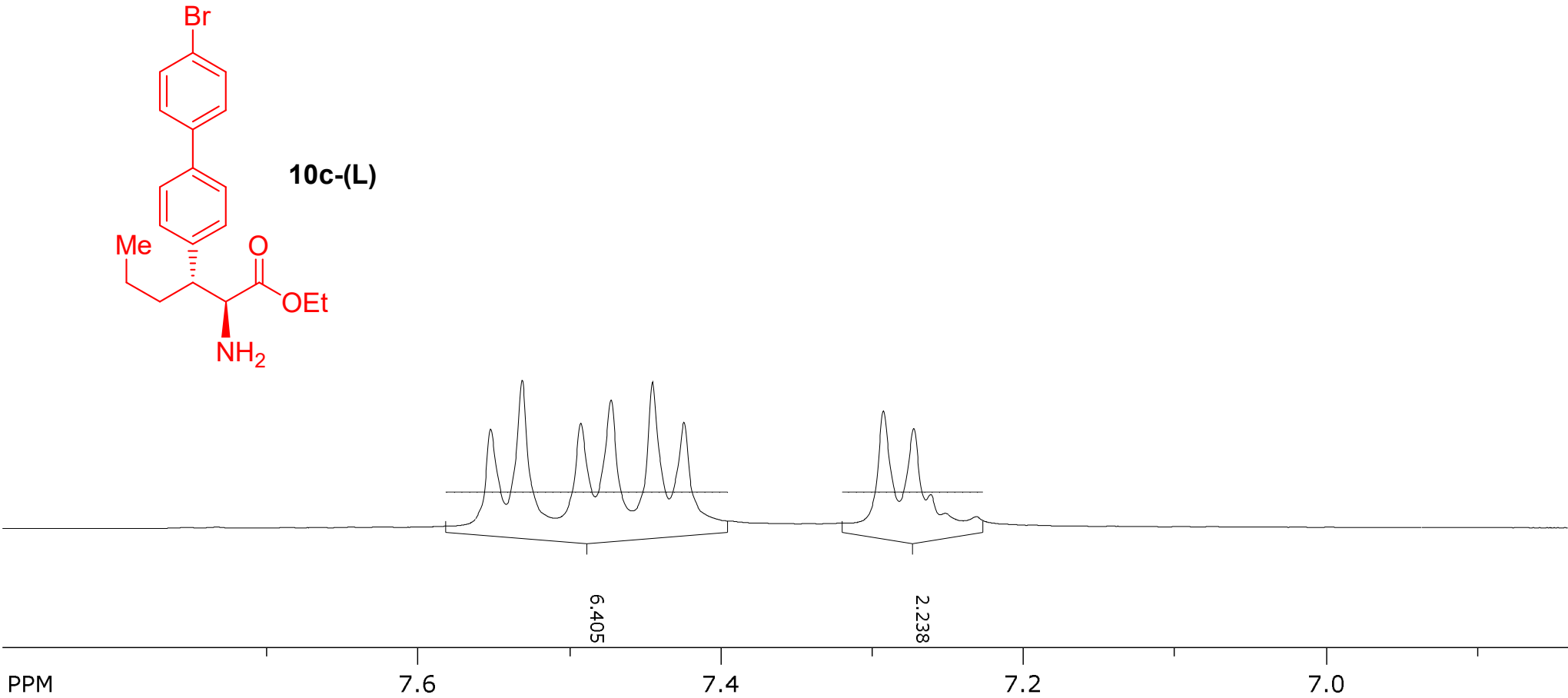


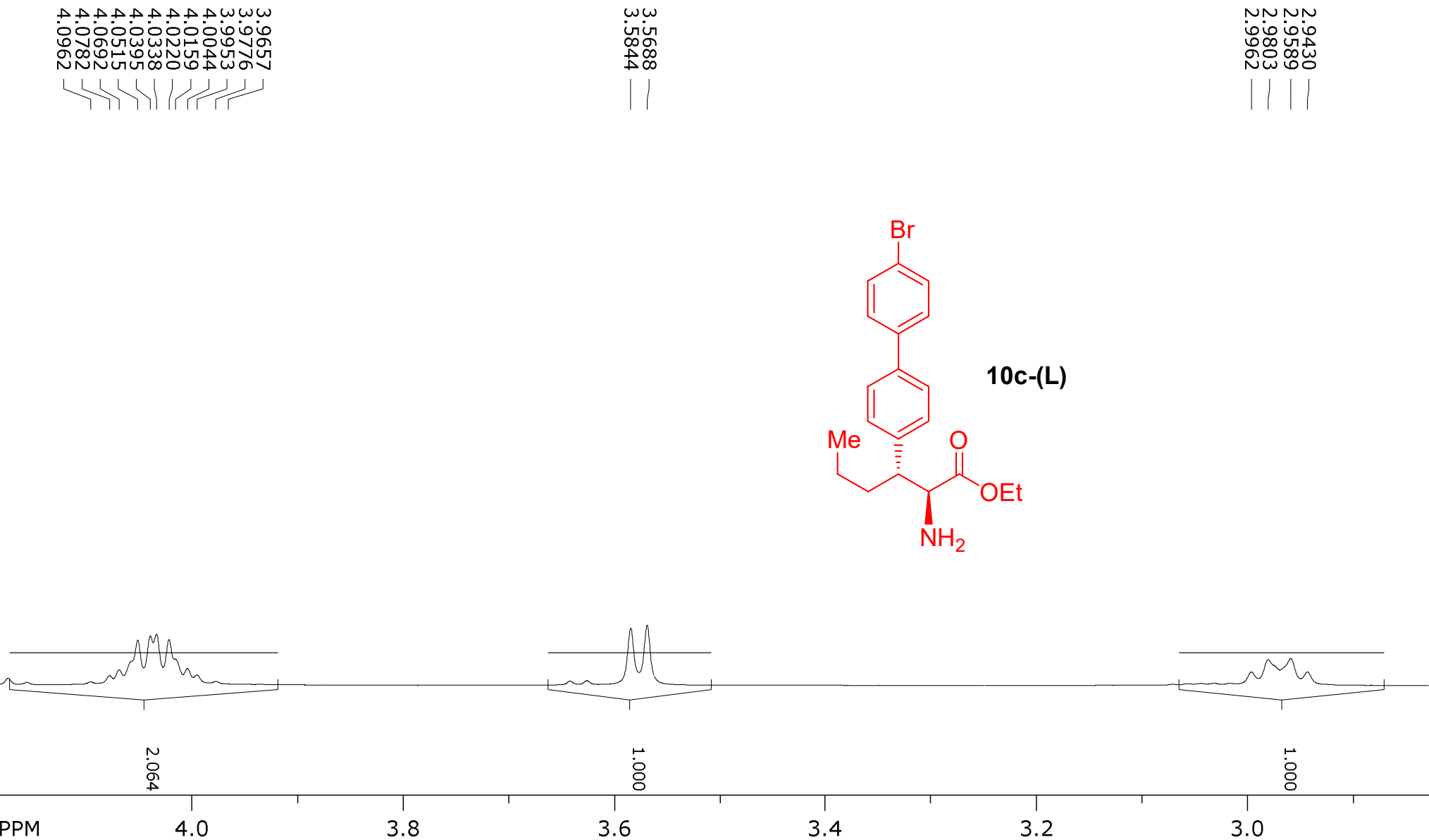


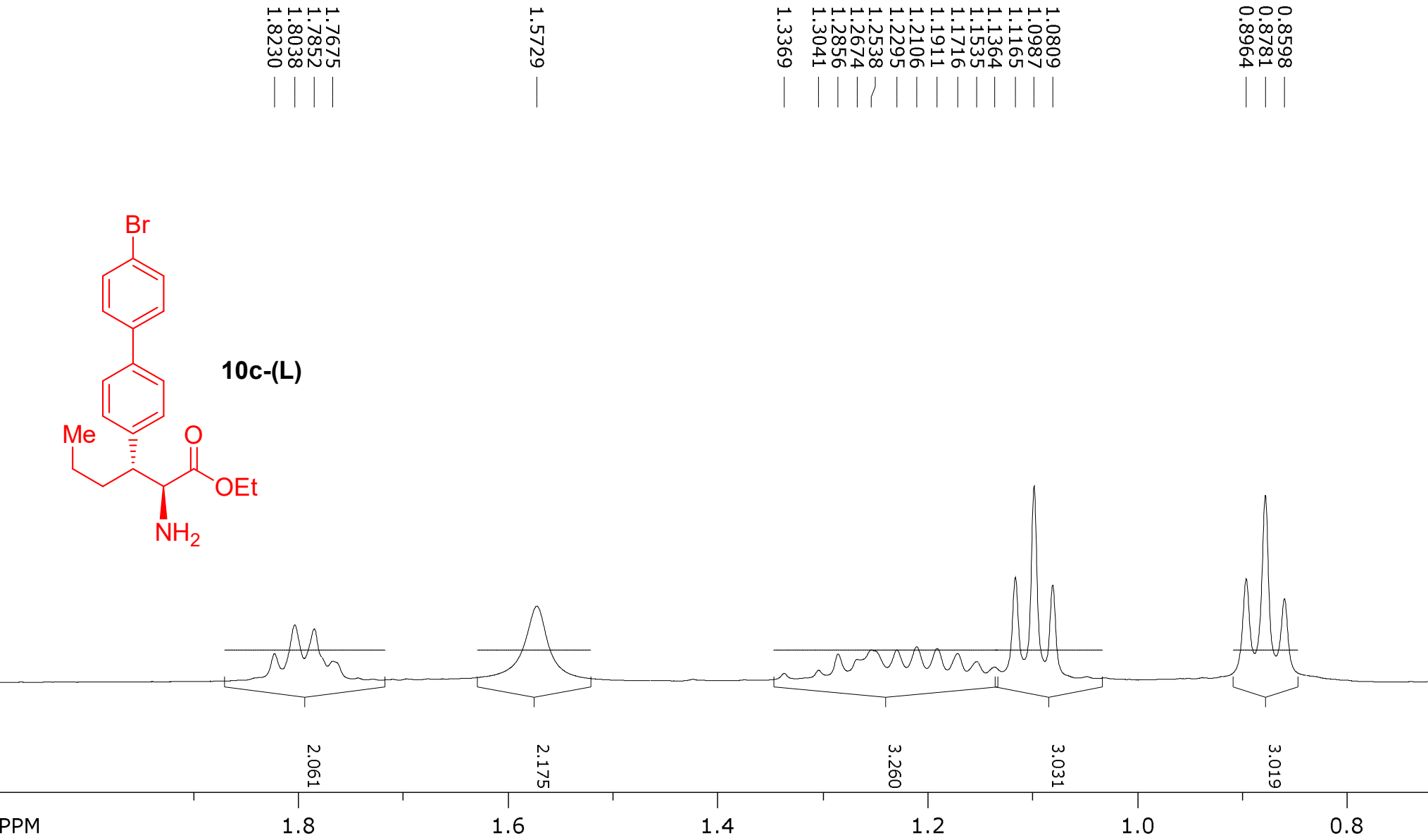


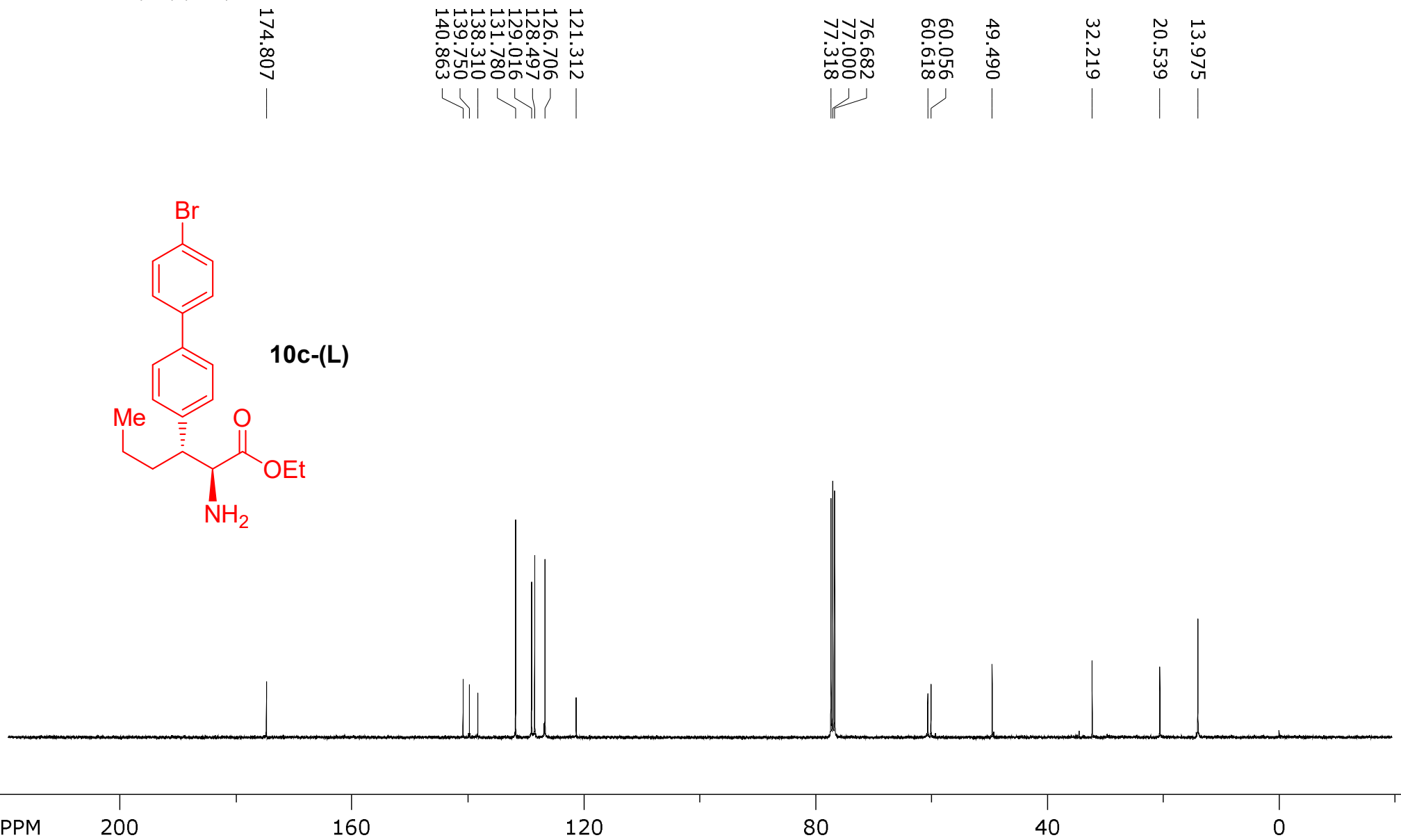


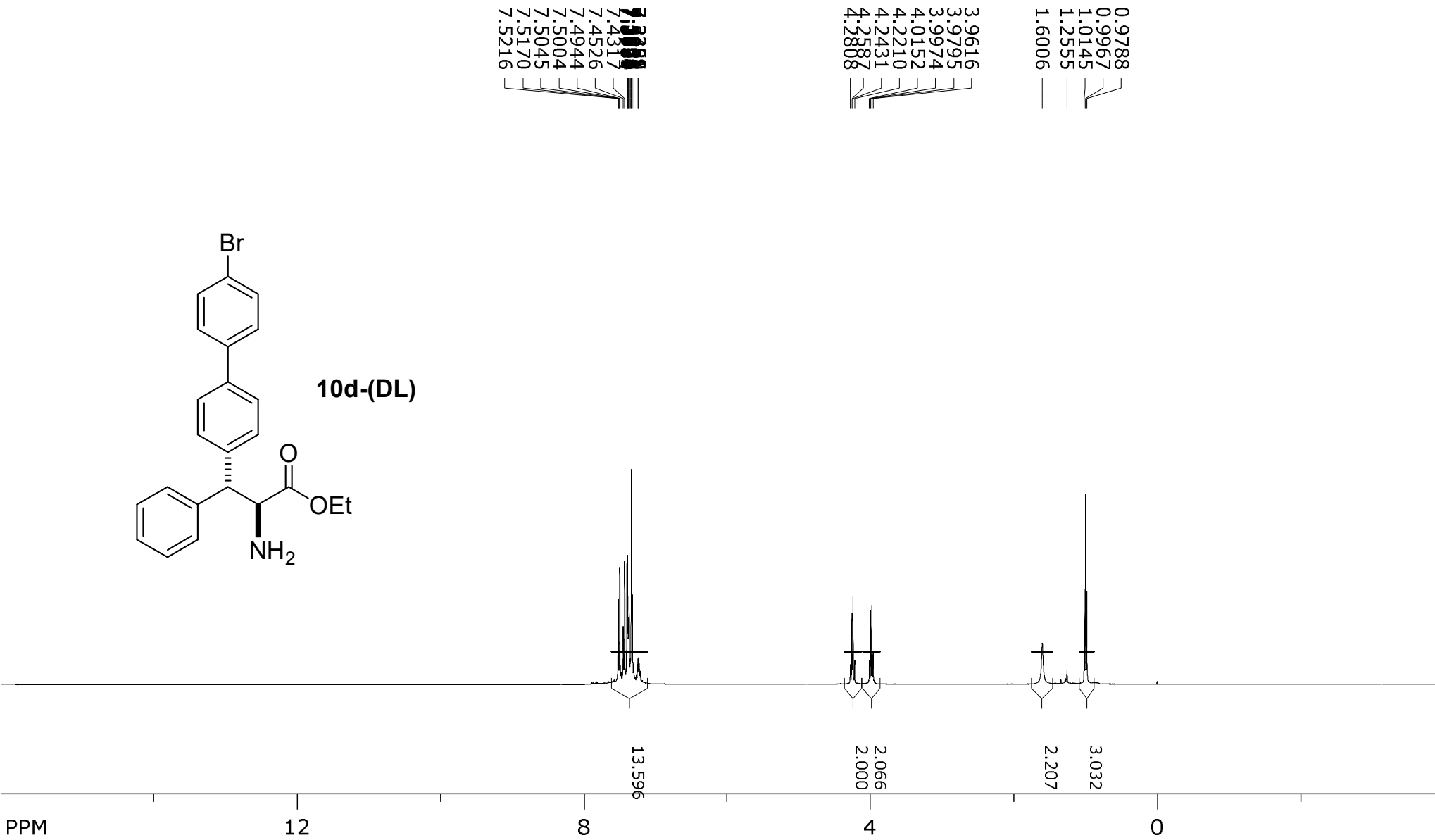
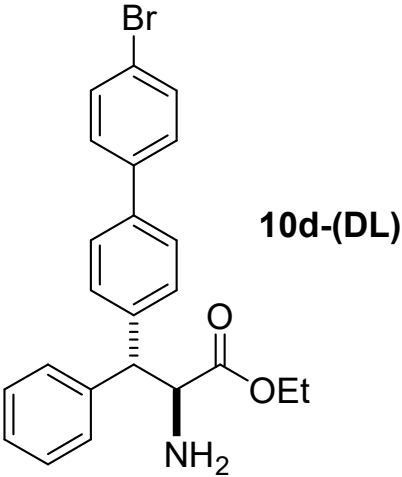
7.4244 —
7.4452 —
7.4726 —
7.4927 —
7.5314 —
7.5523 —
7.2310 —
7.2516 —
7.2612 —
7.2724 —
7.2925 —

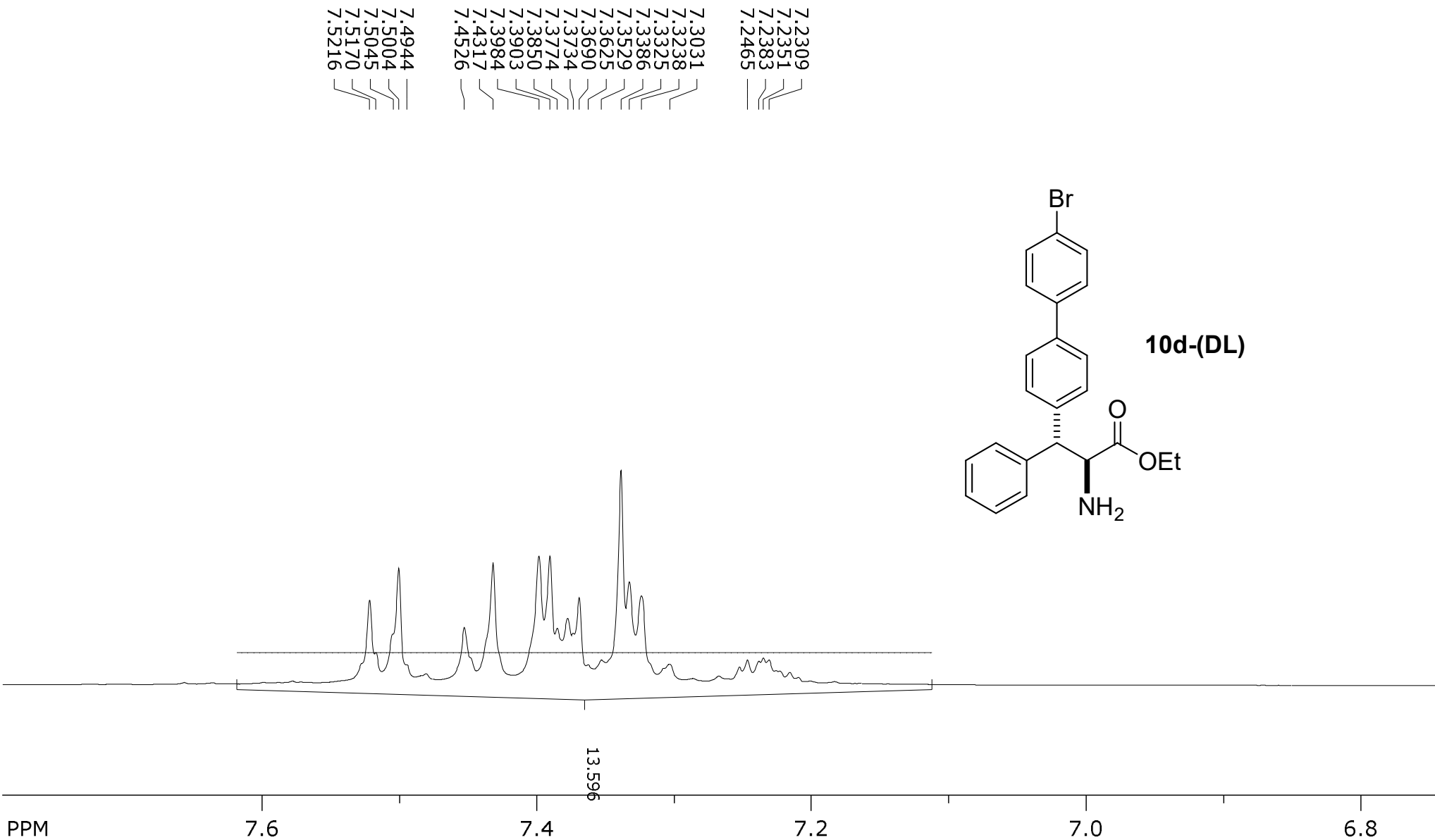


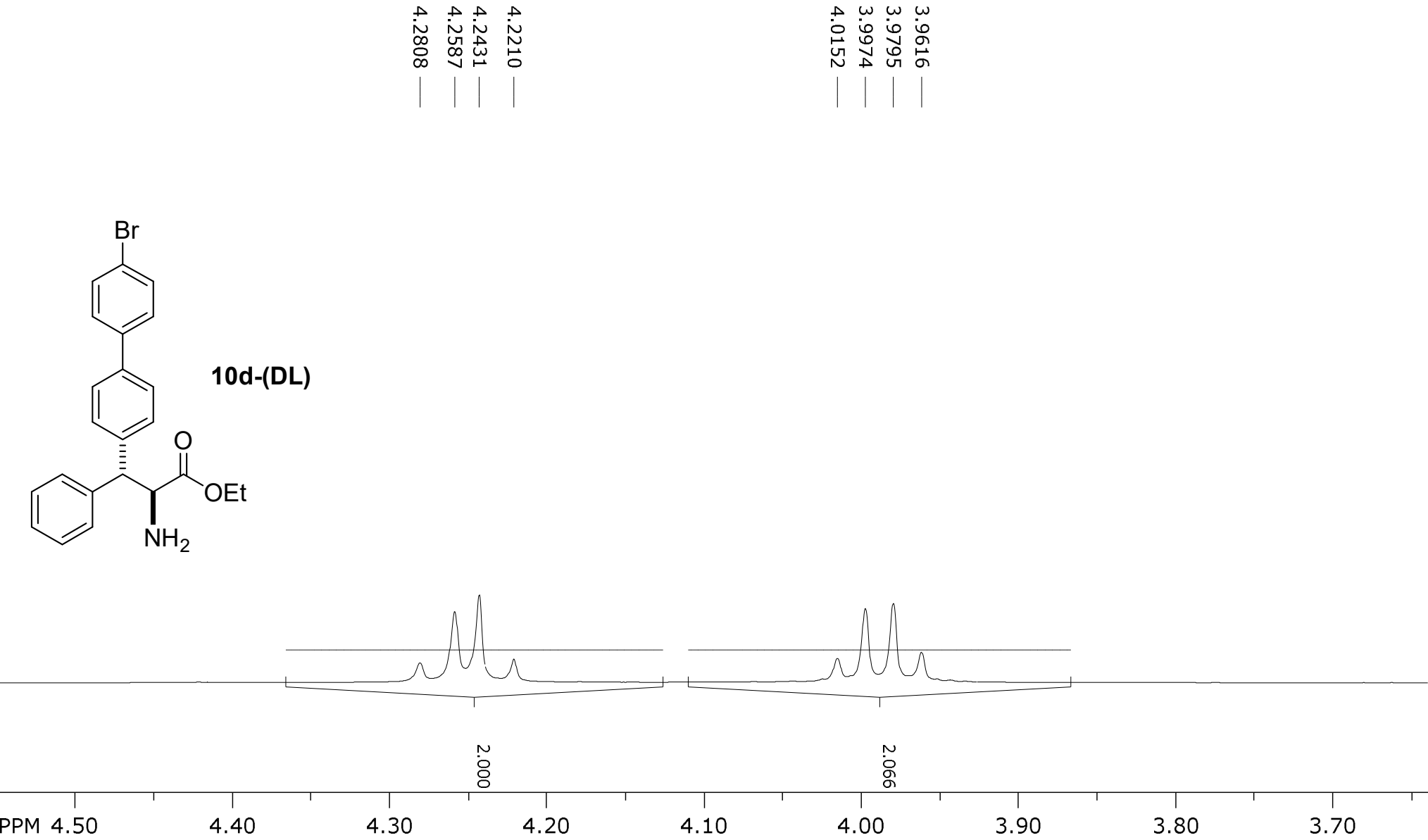


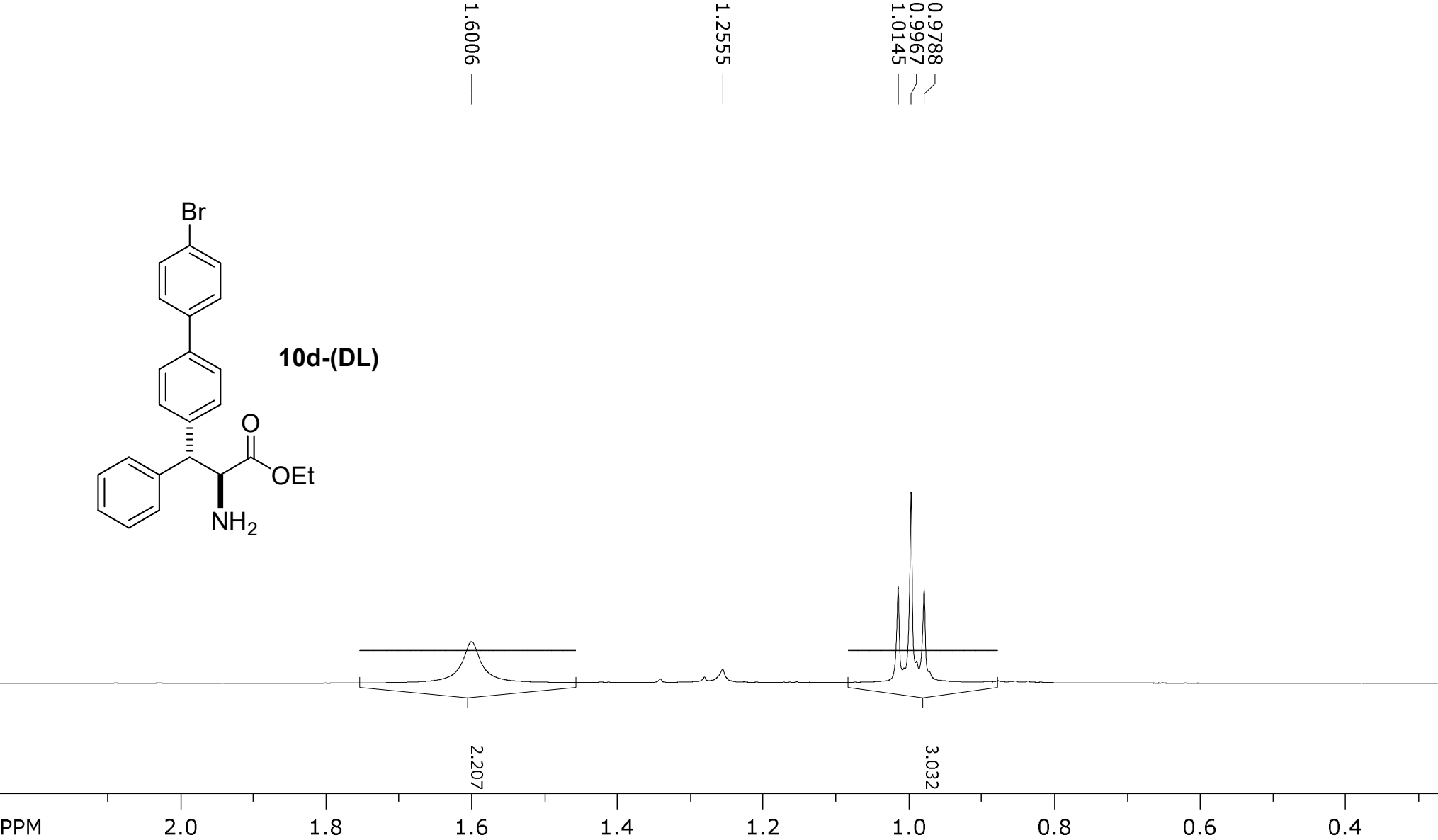


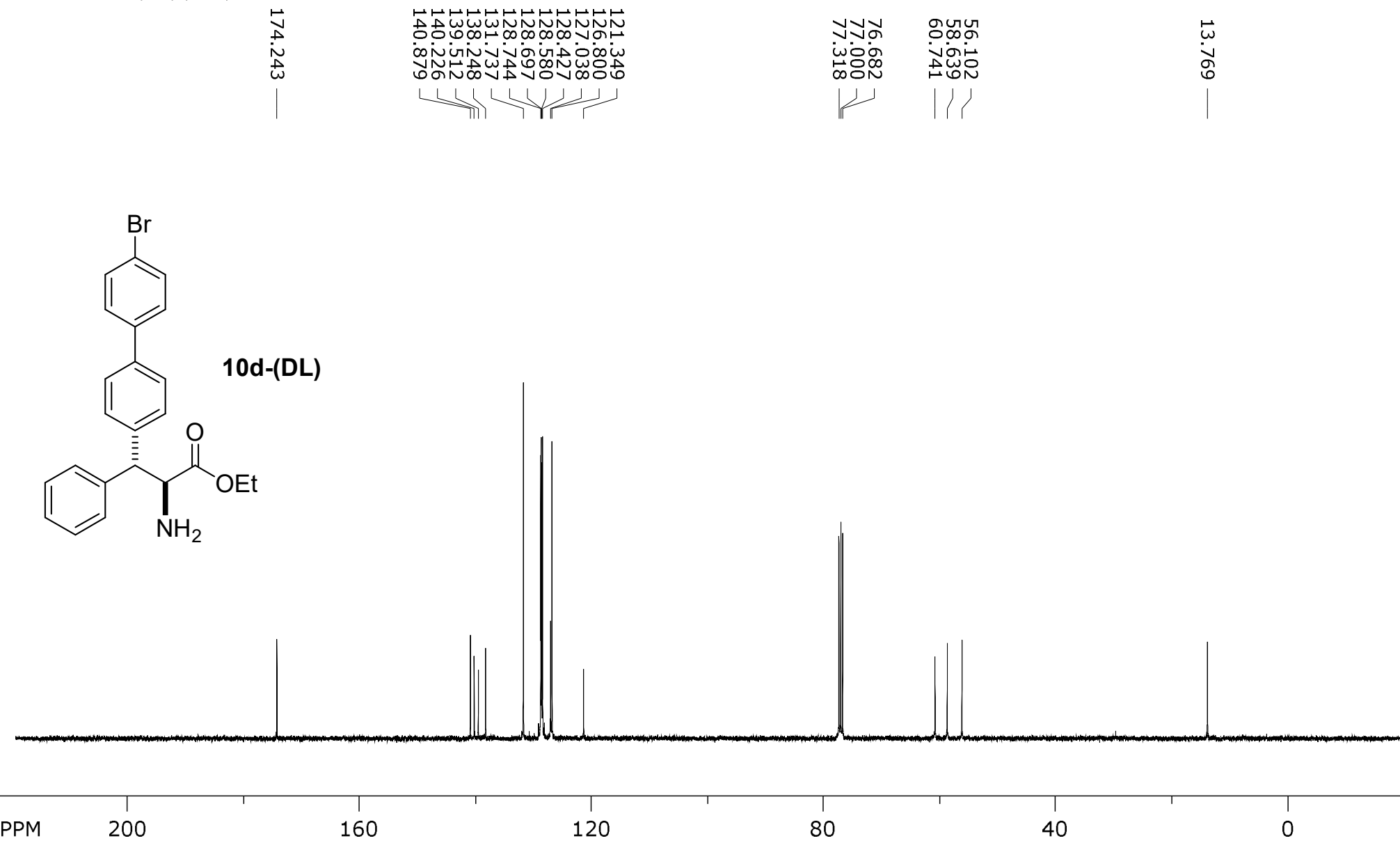


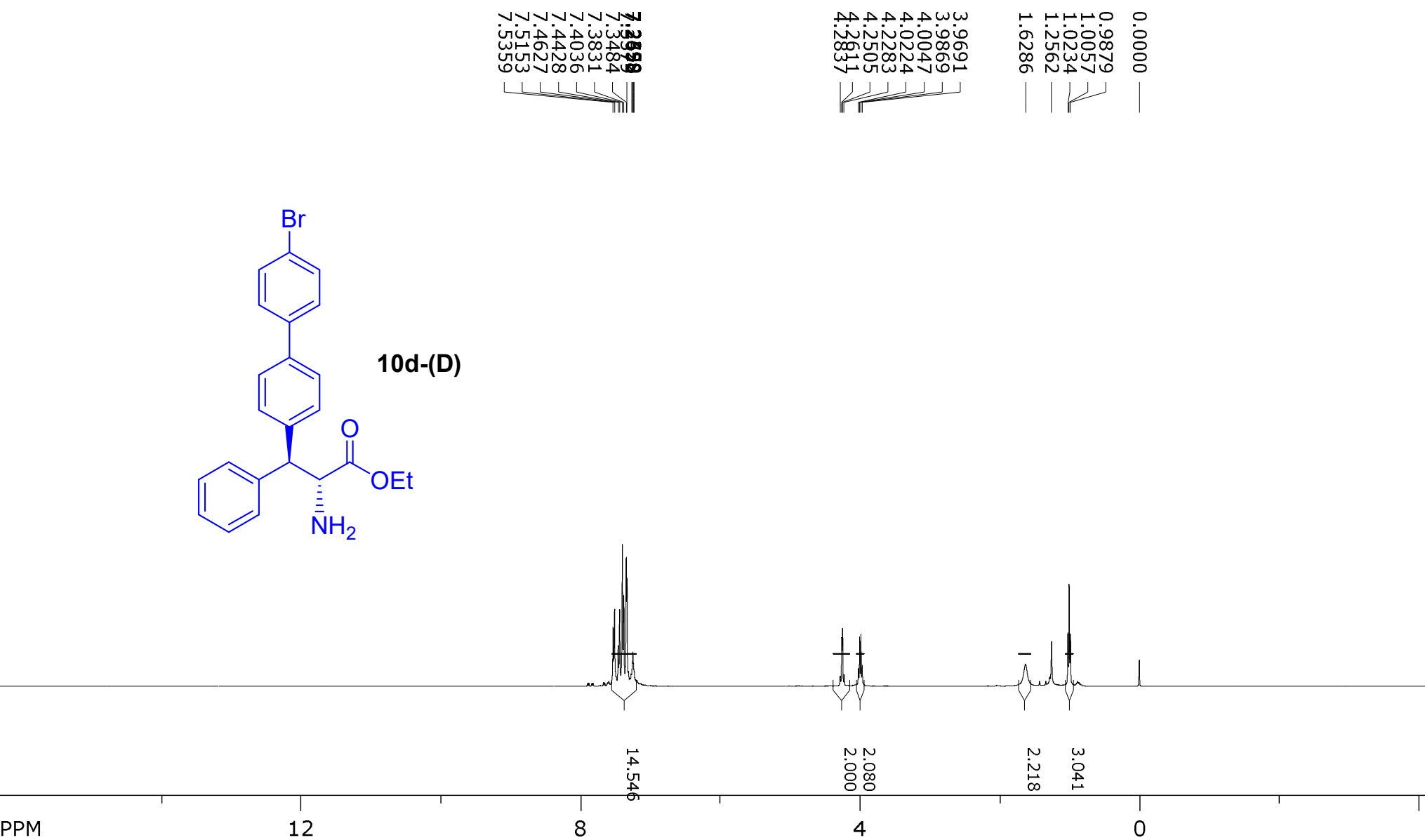


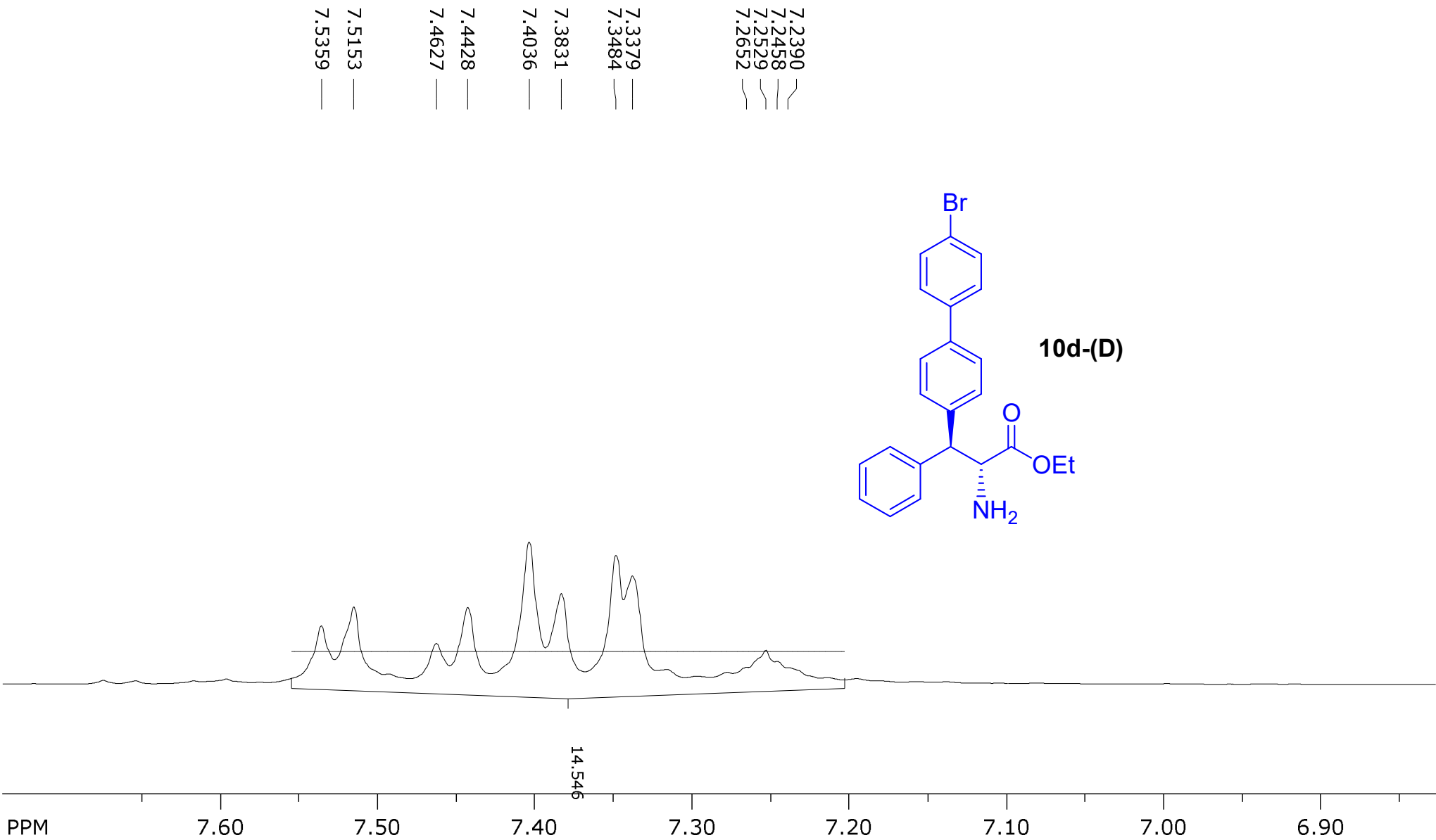


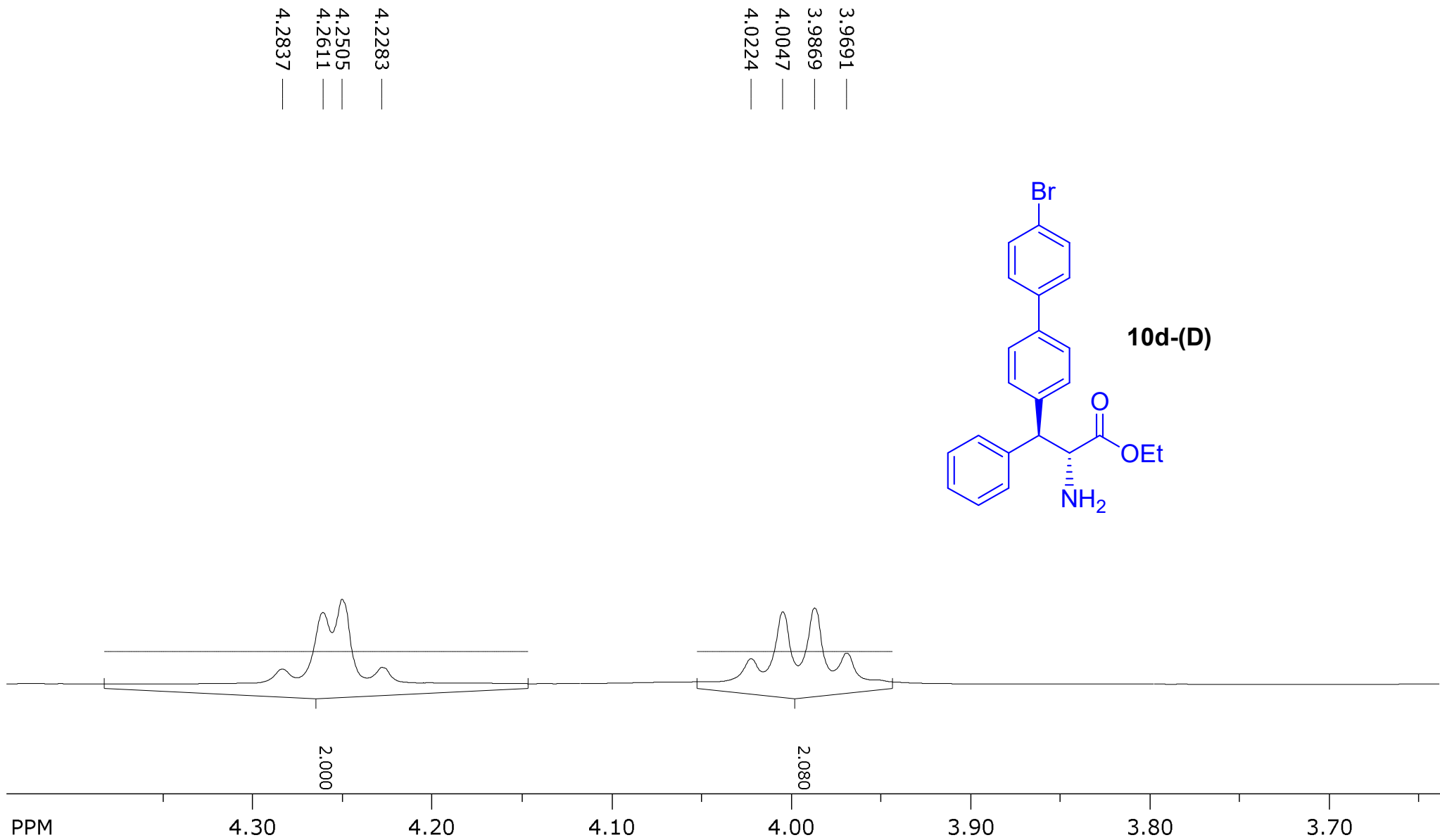


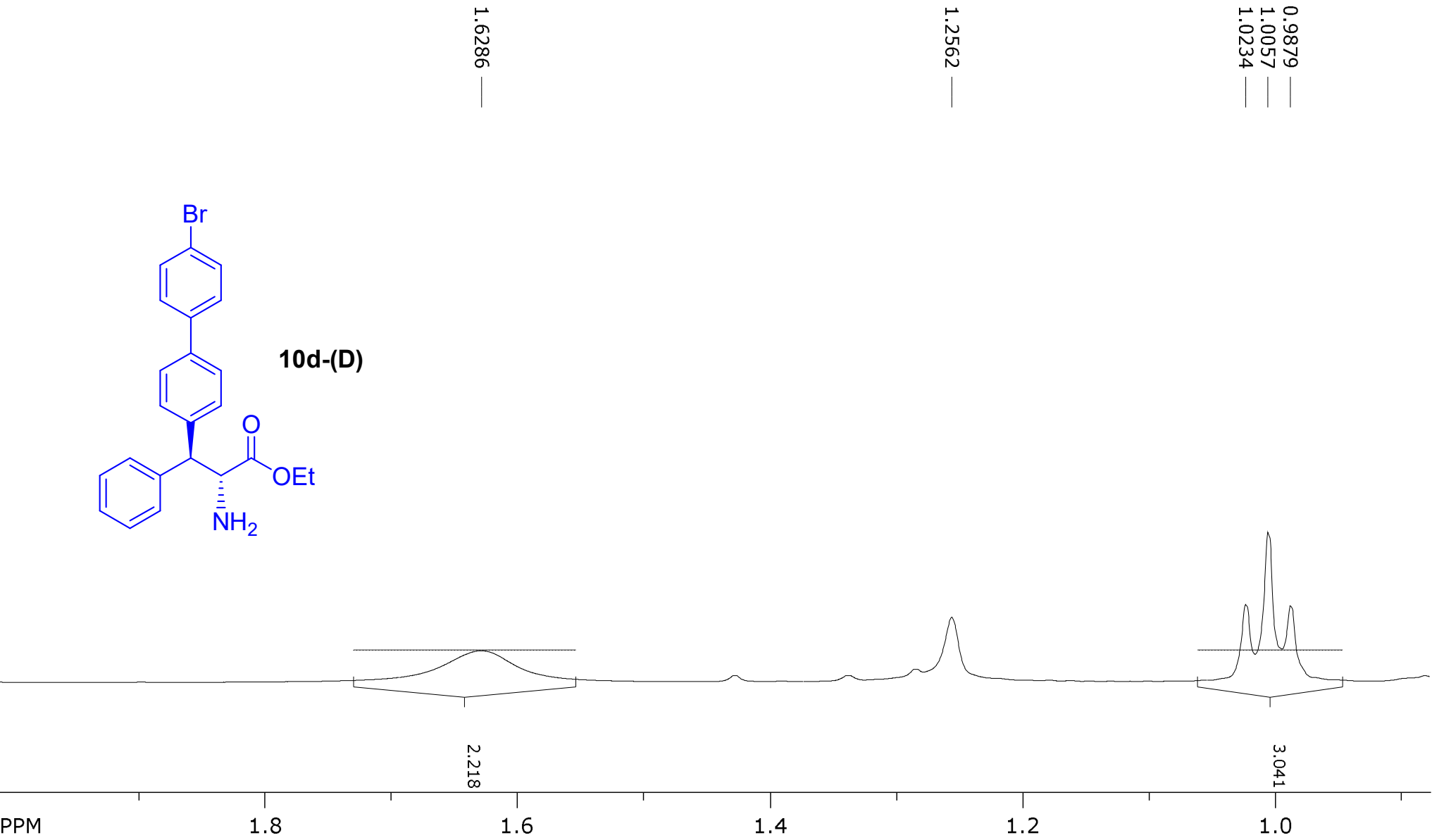


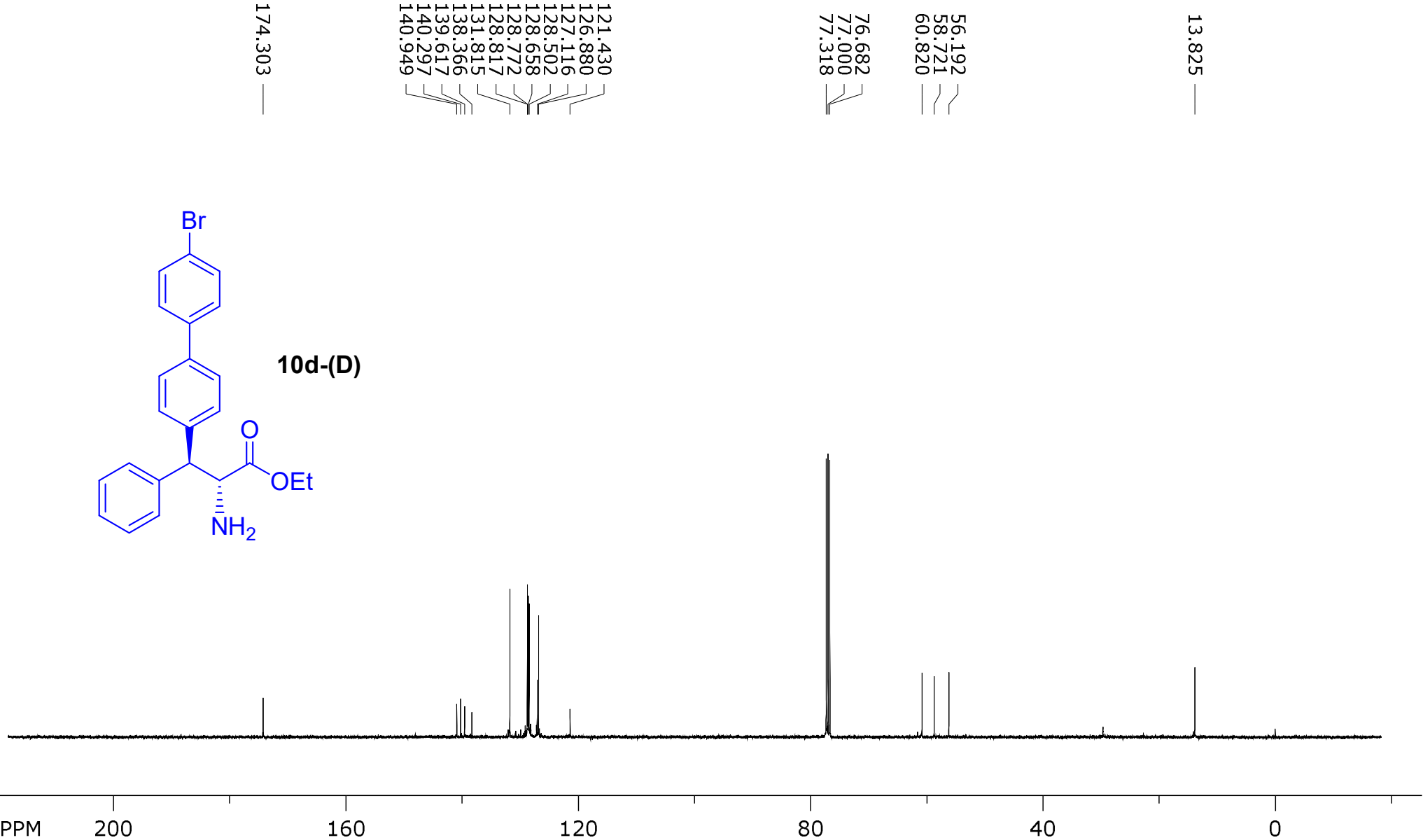


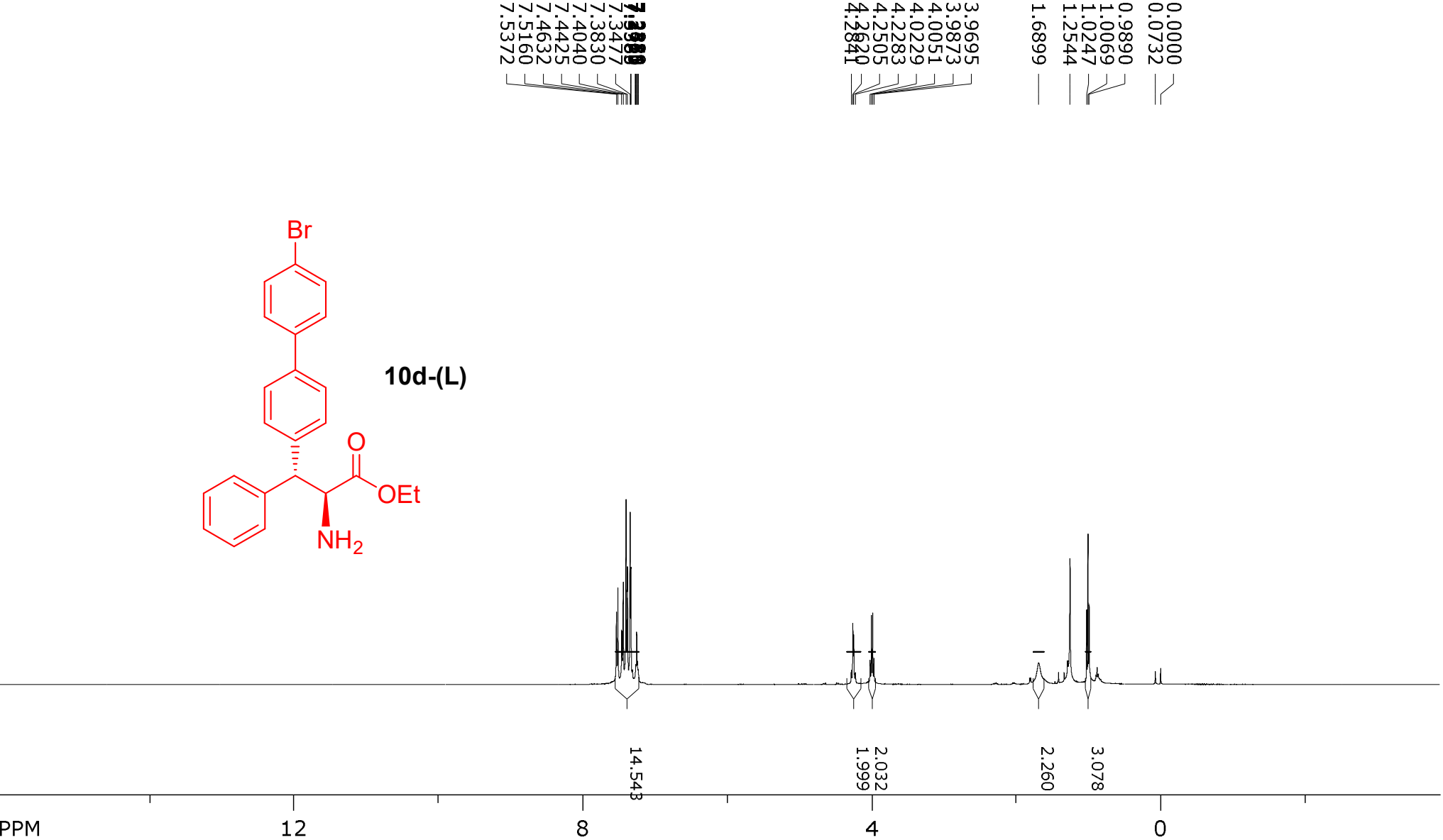


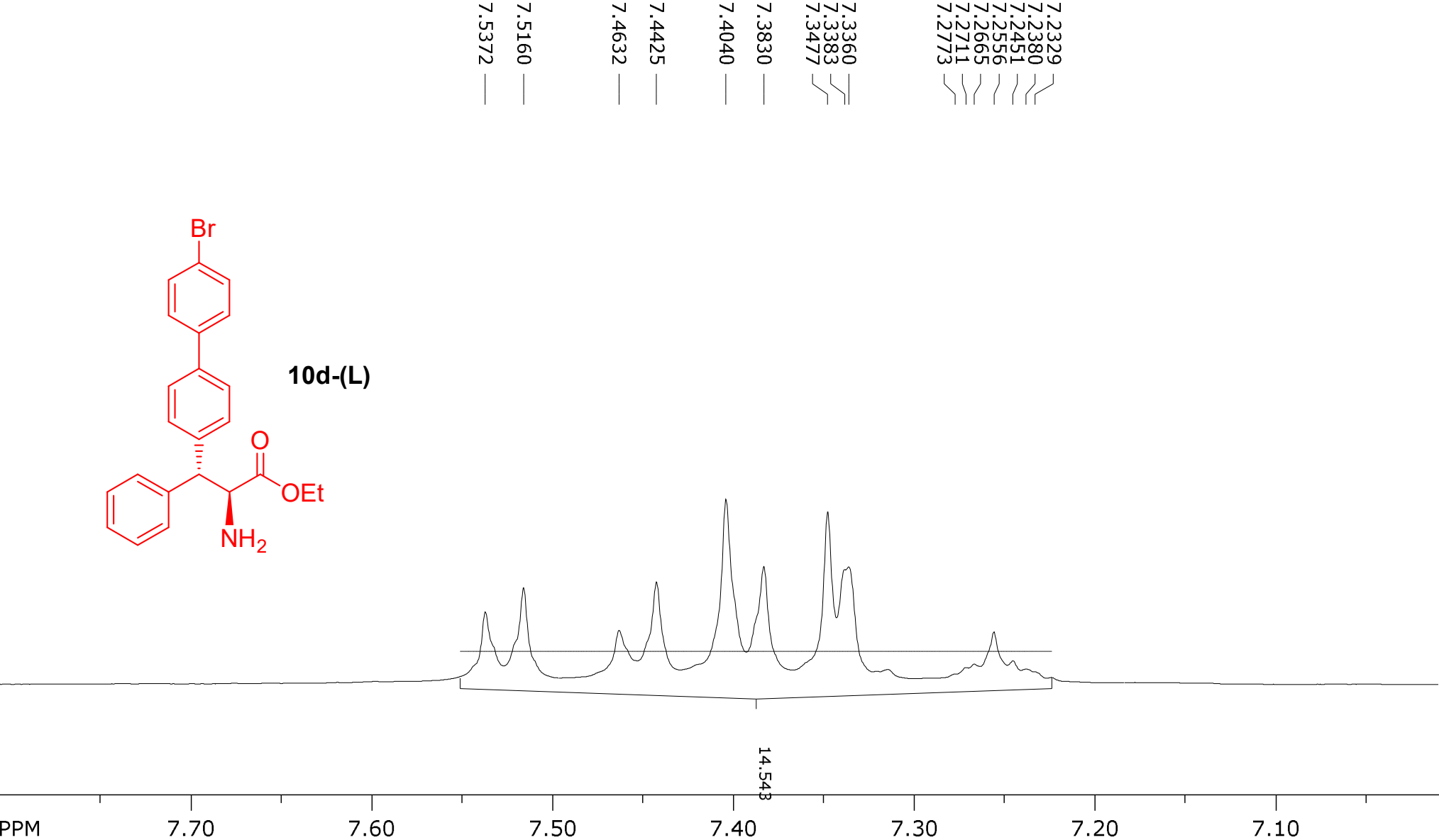






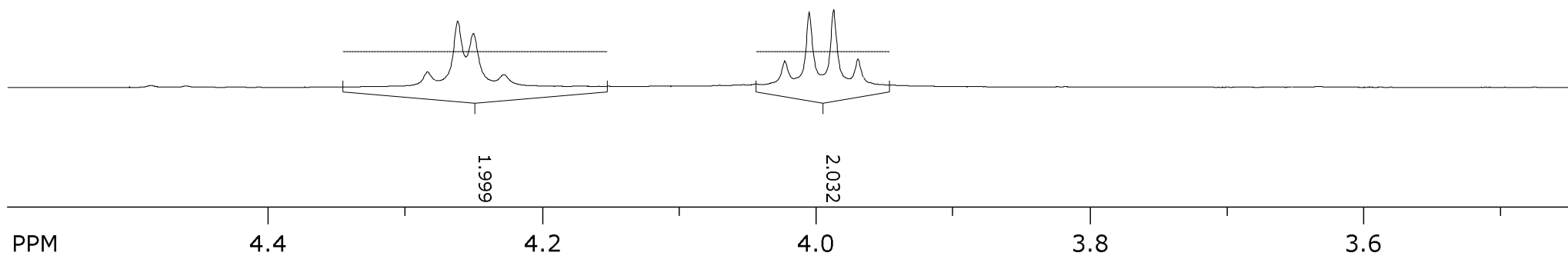
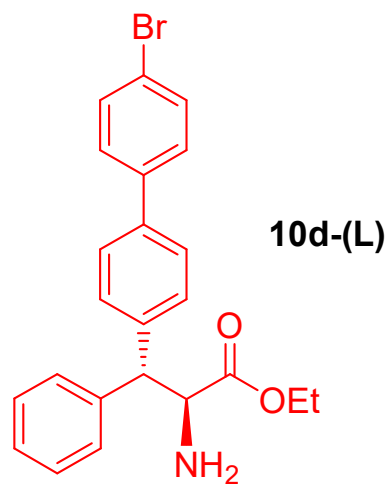


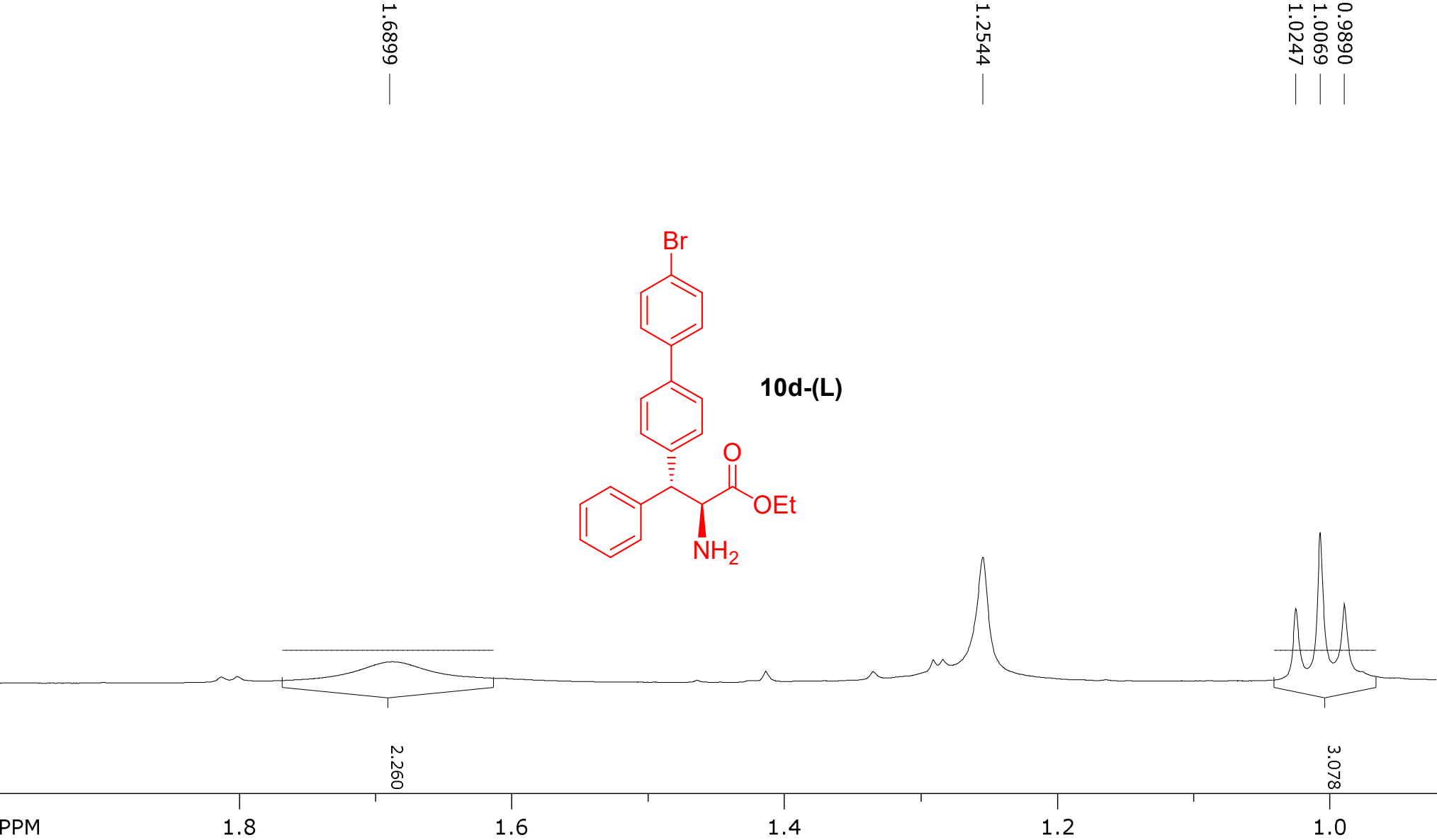


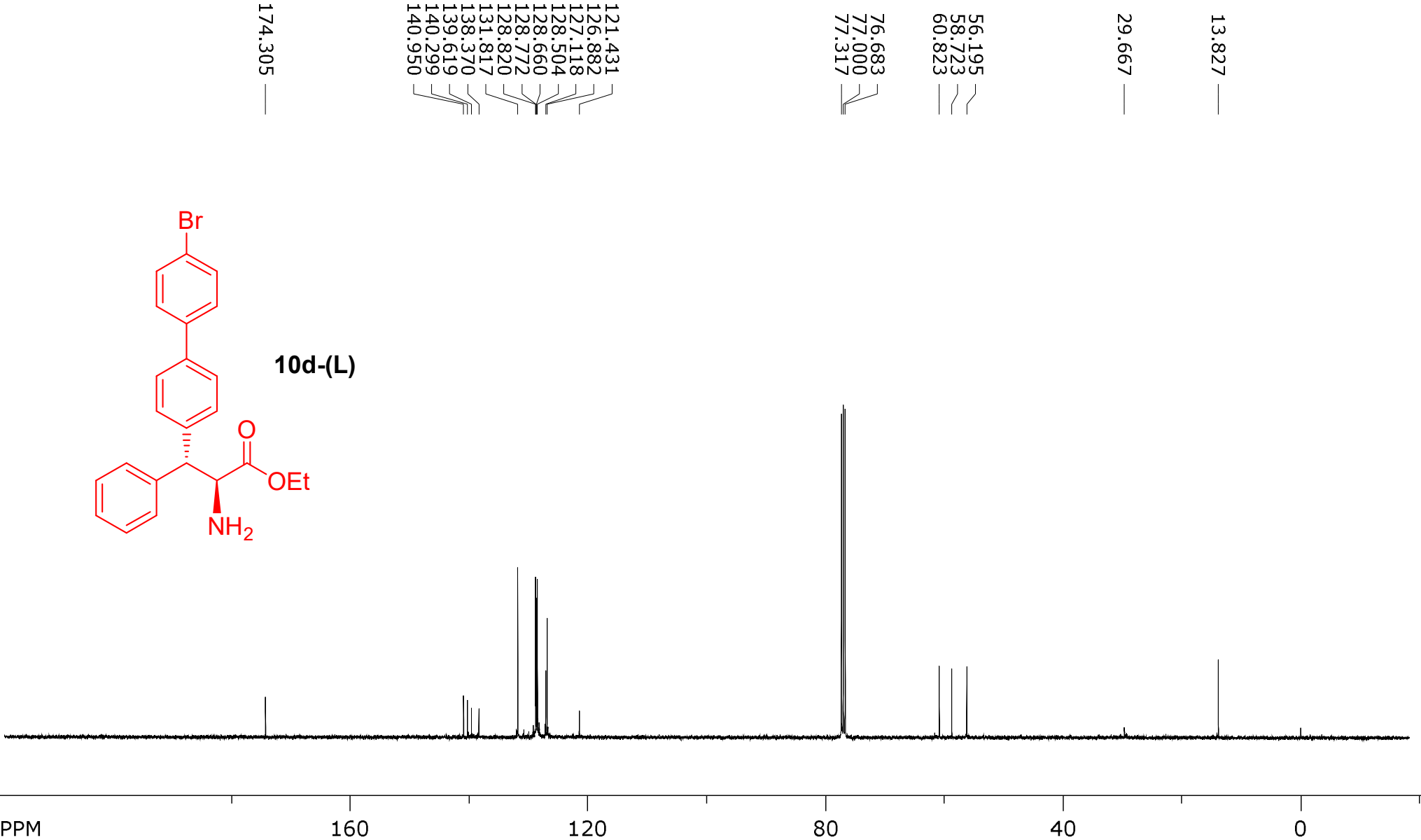


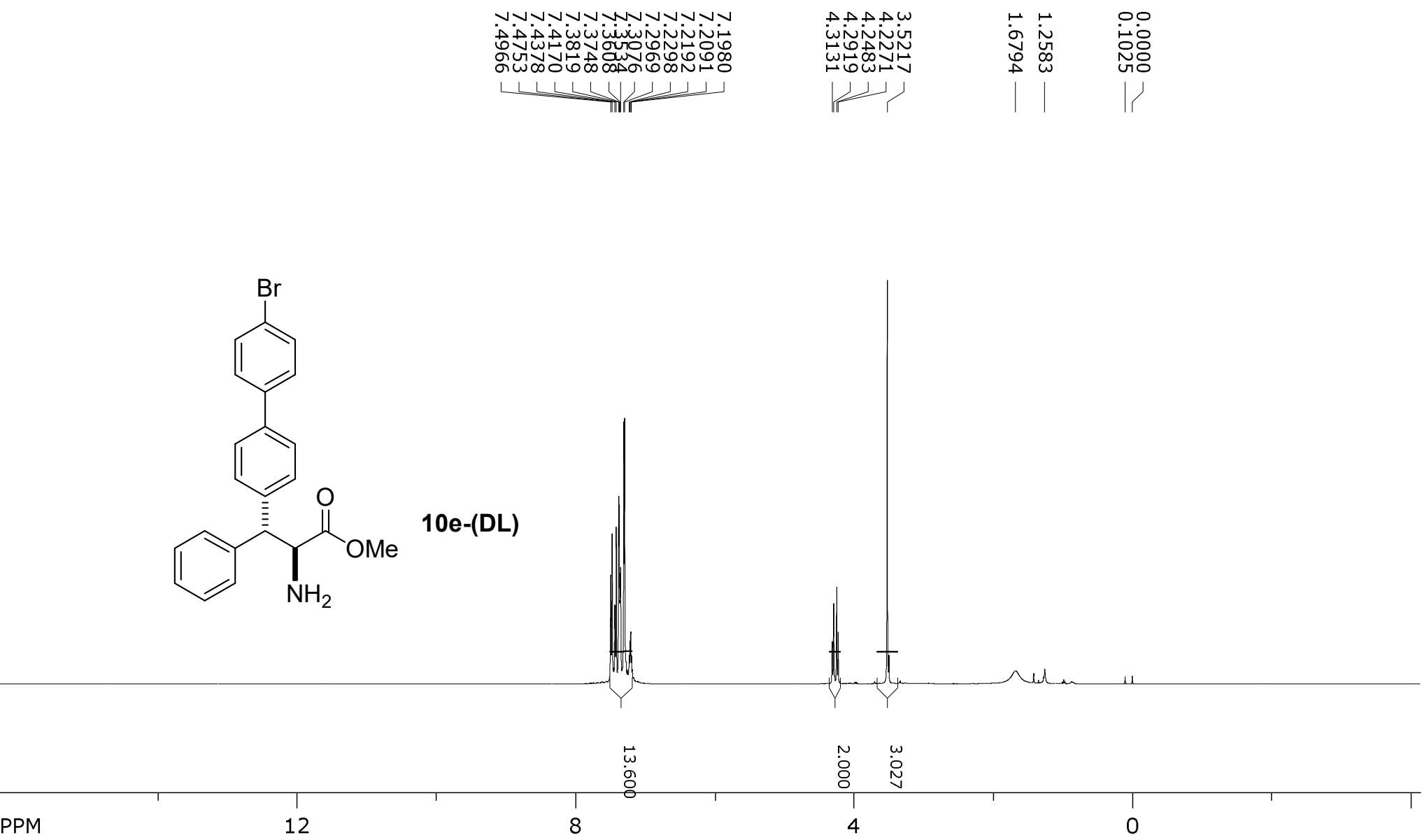
4.2283
4.2505
4.2620
4.2841

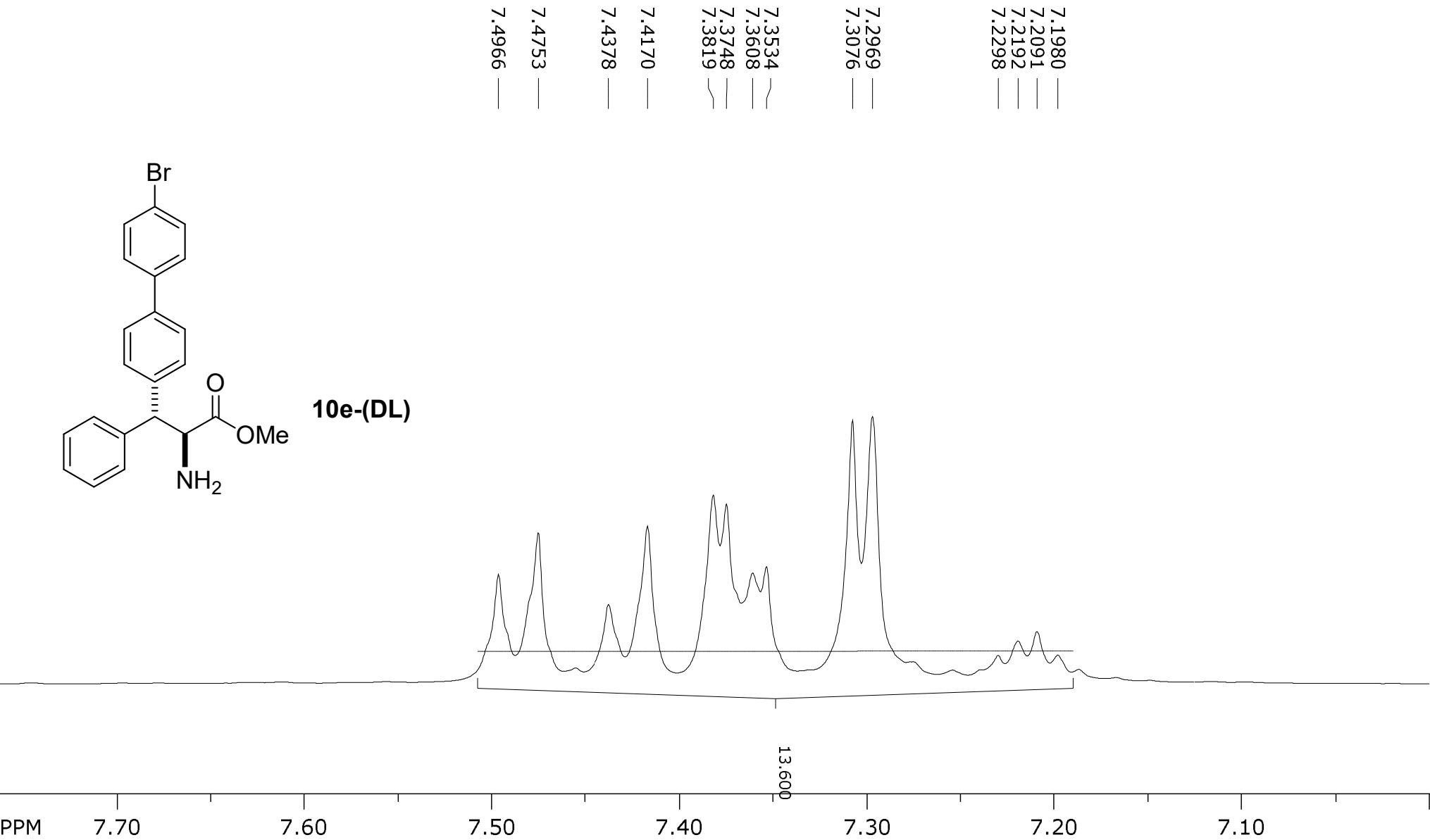
3.9695
3.9873
4.0051
4.0229

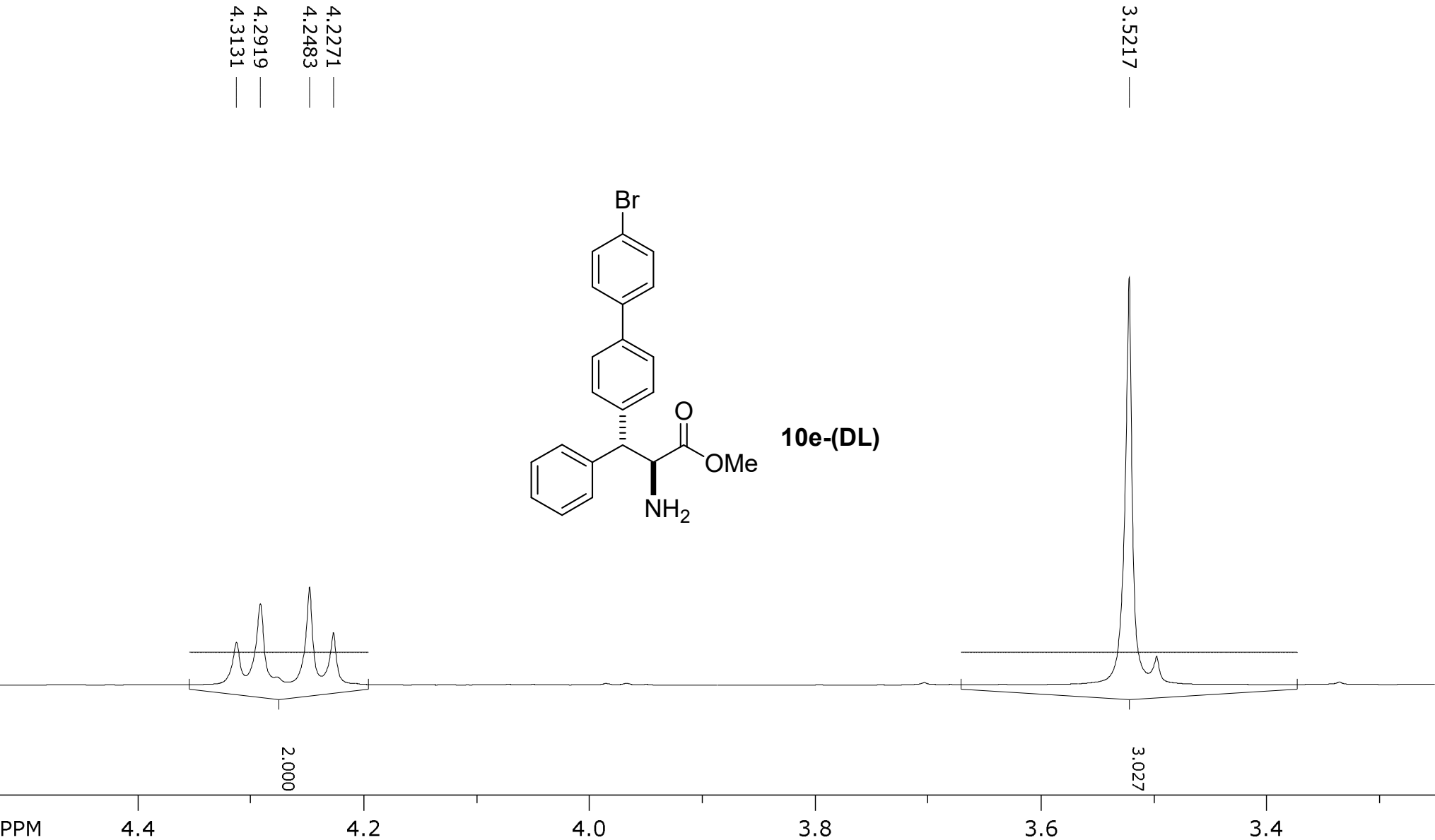


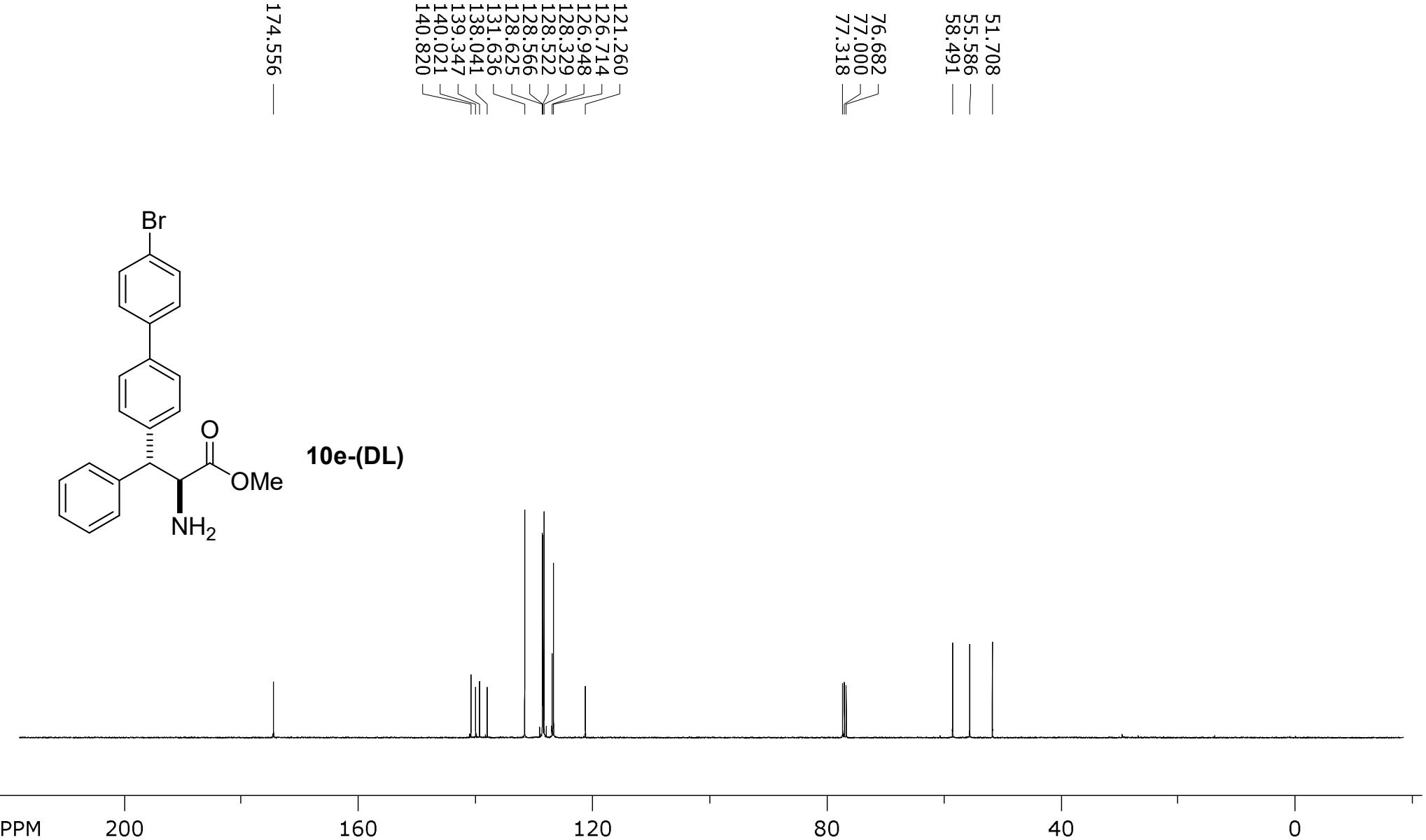


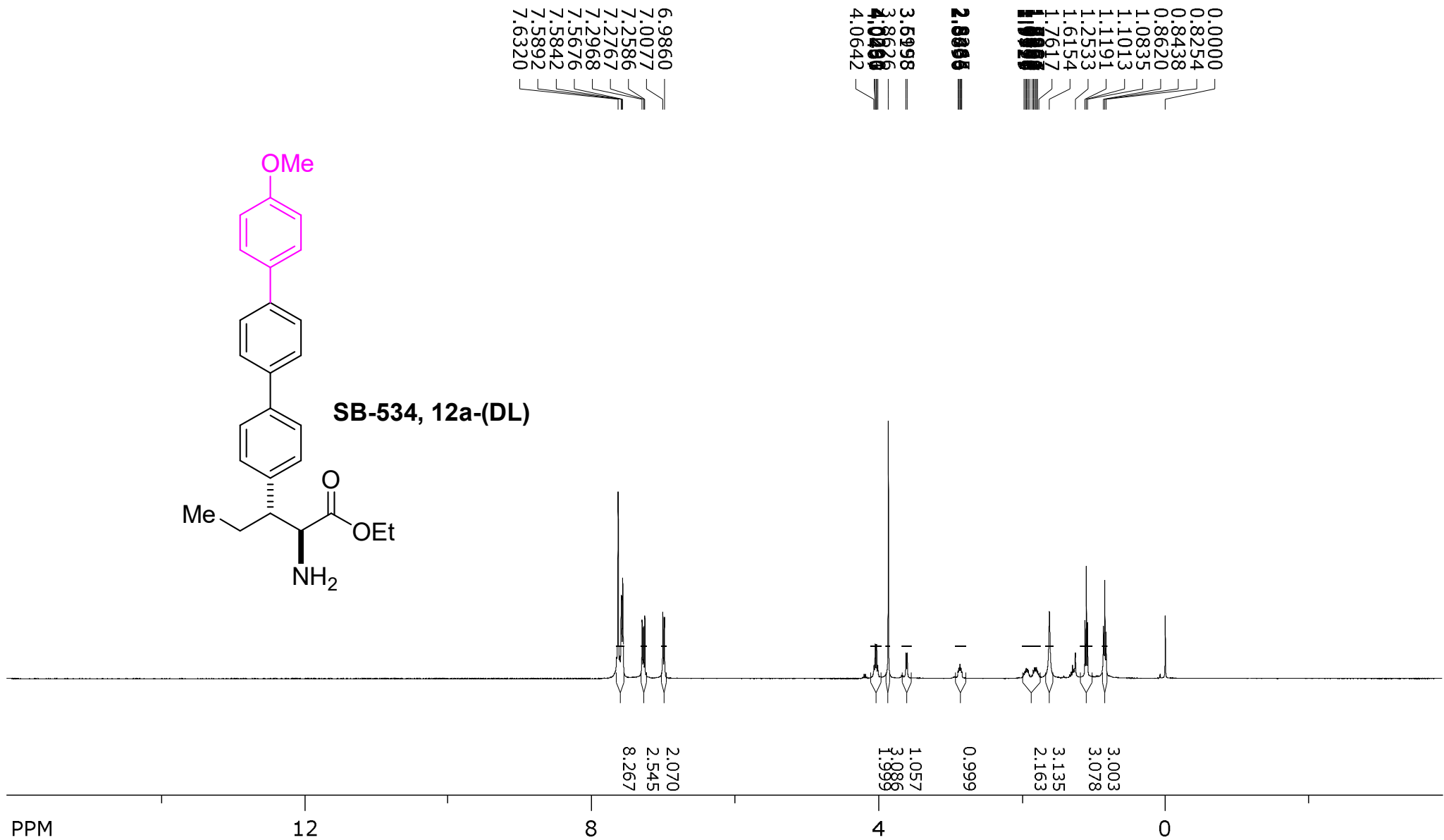


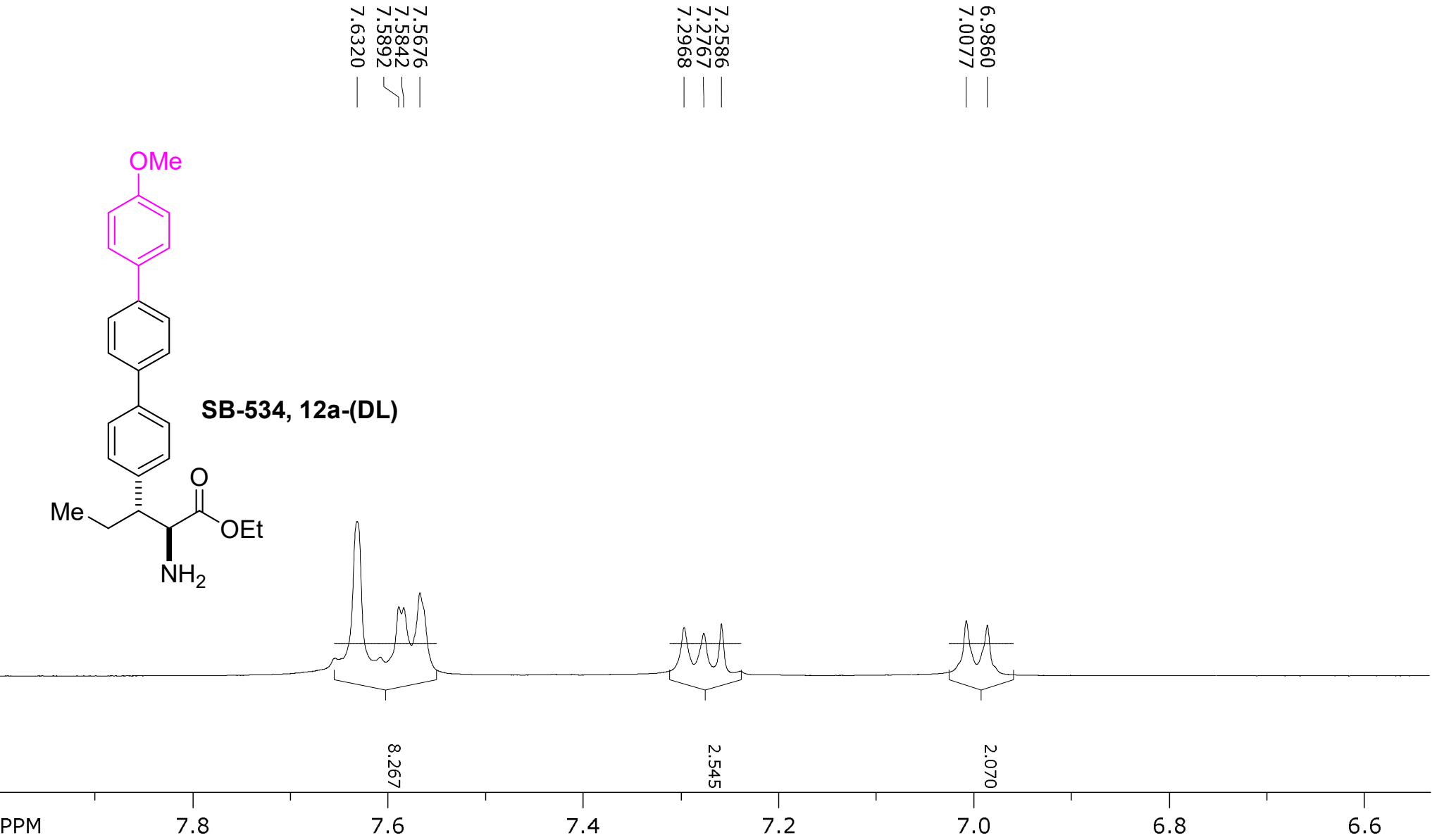


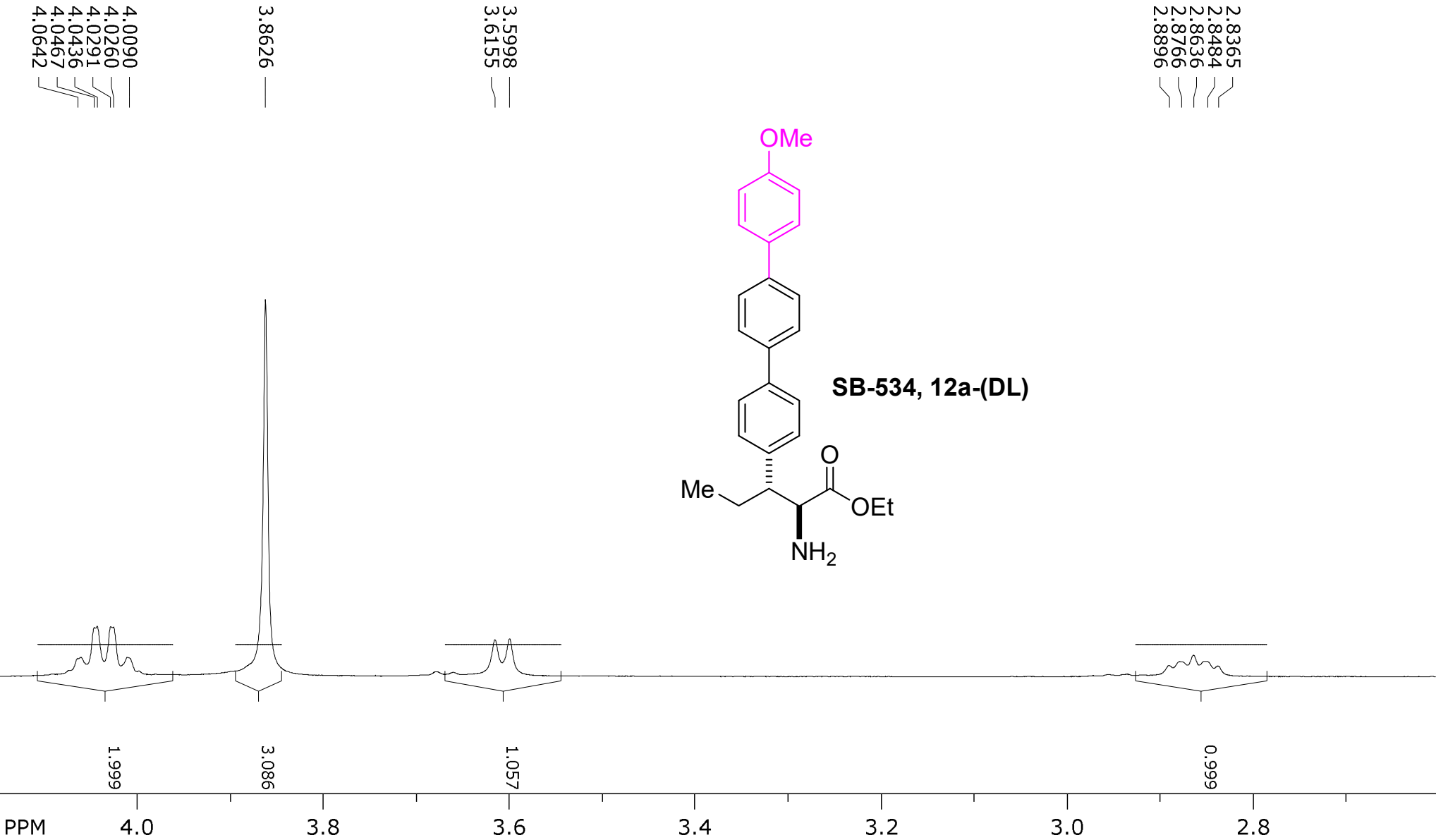


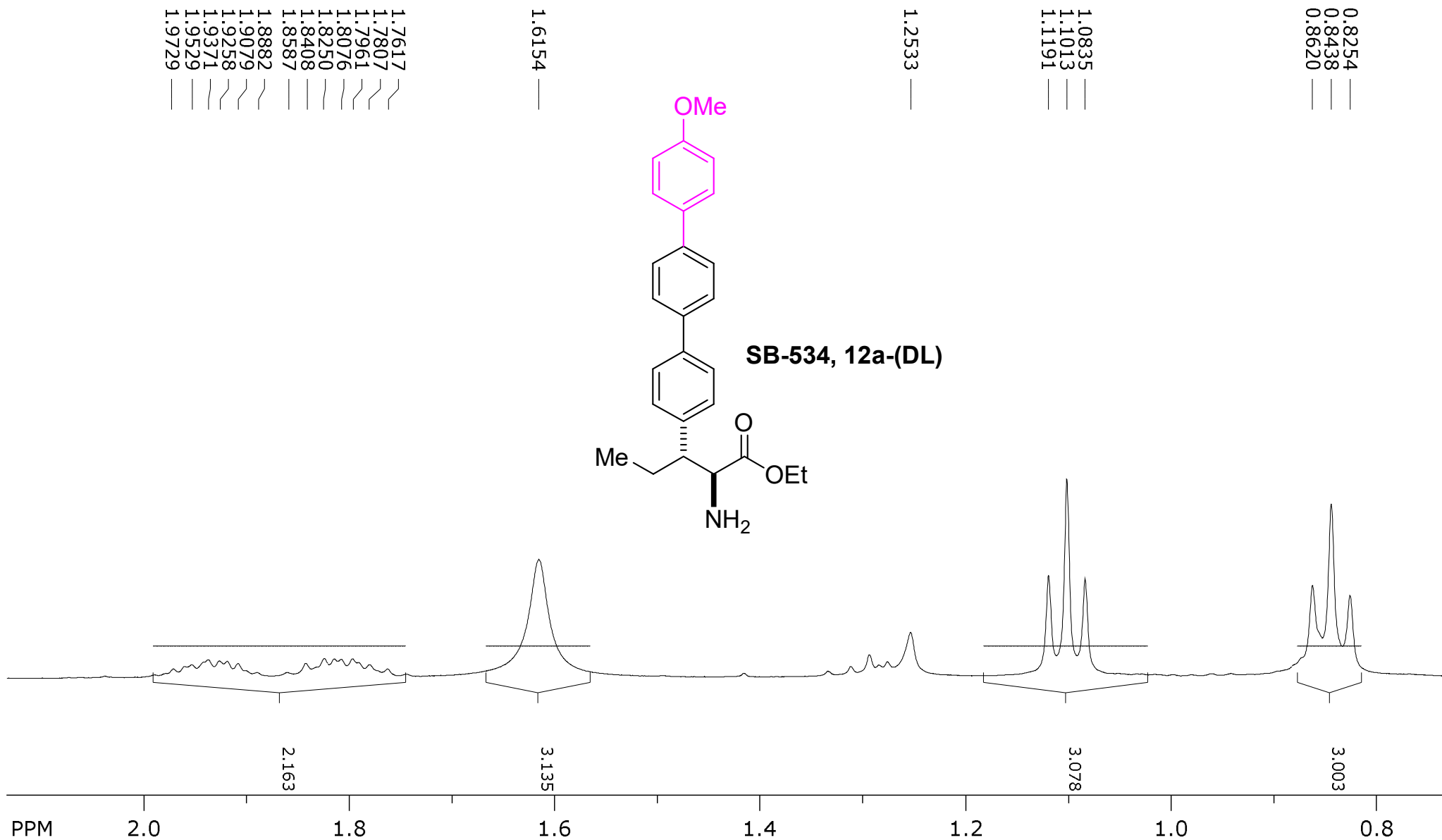


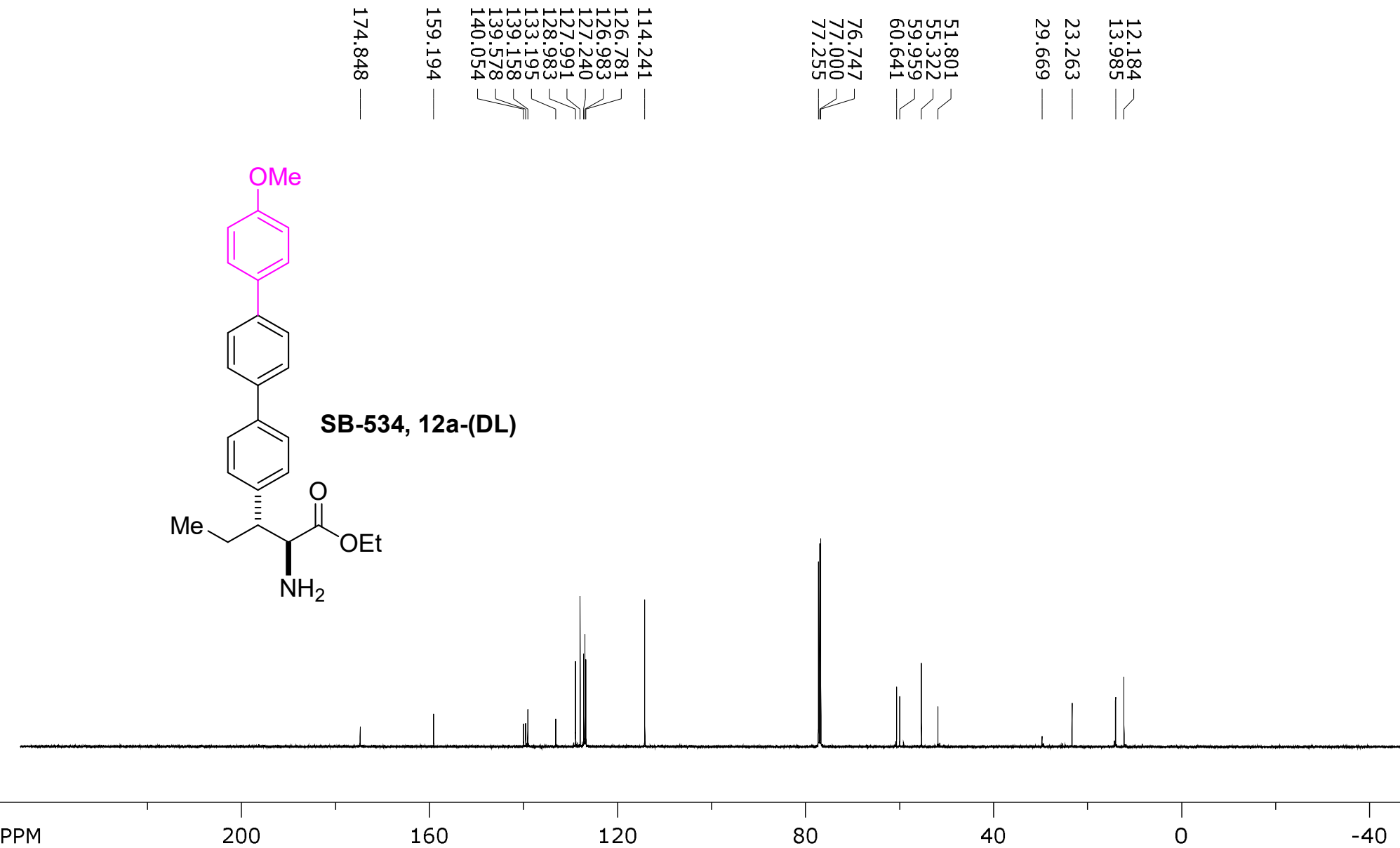


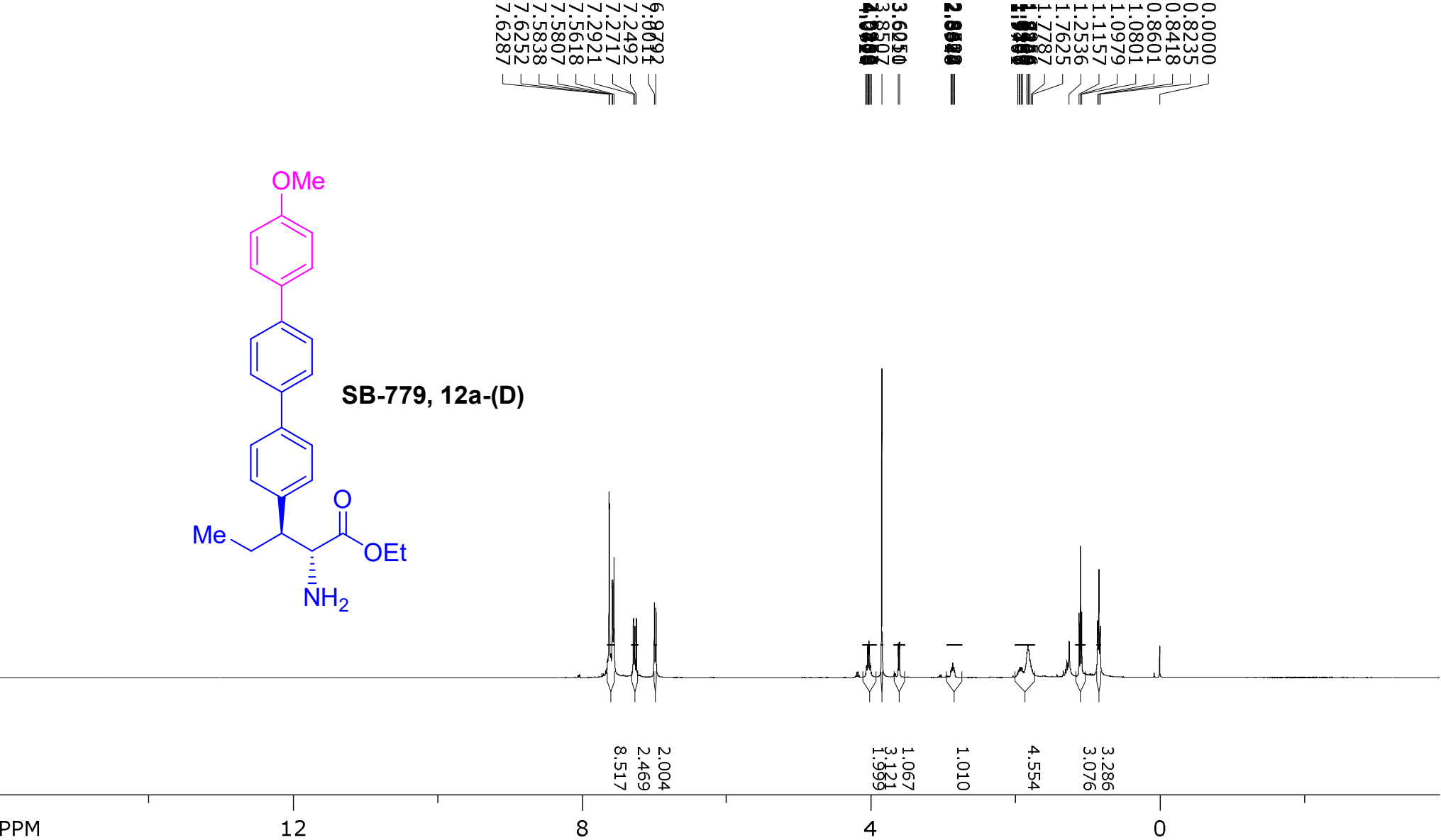


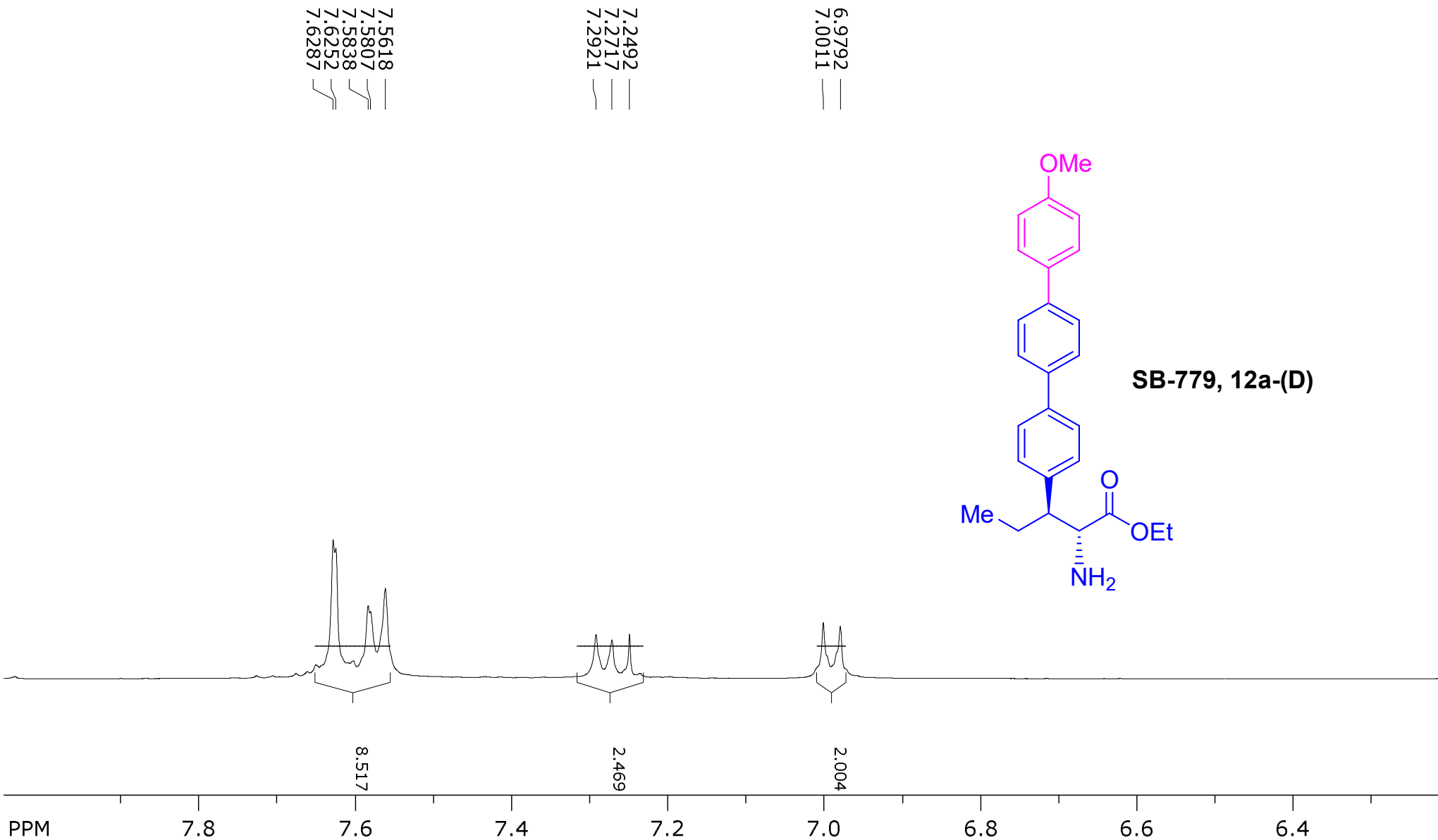


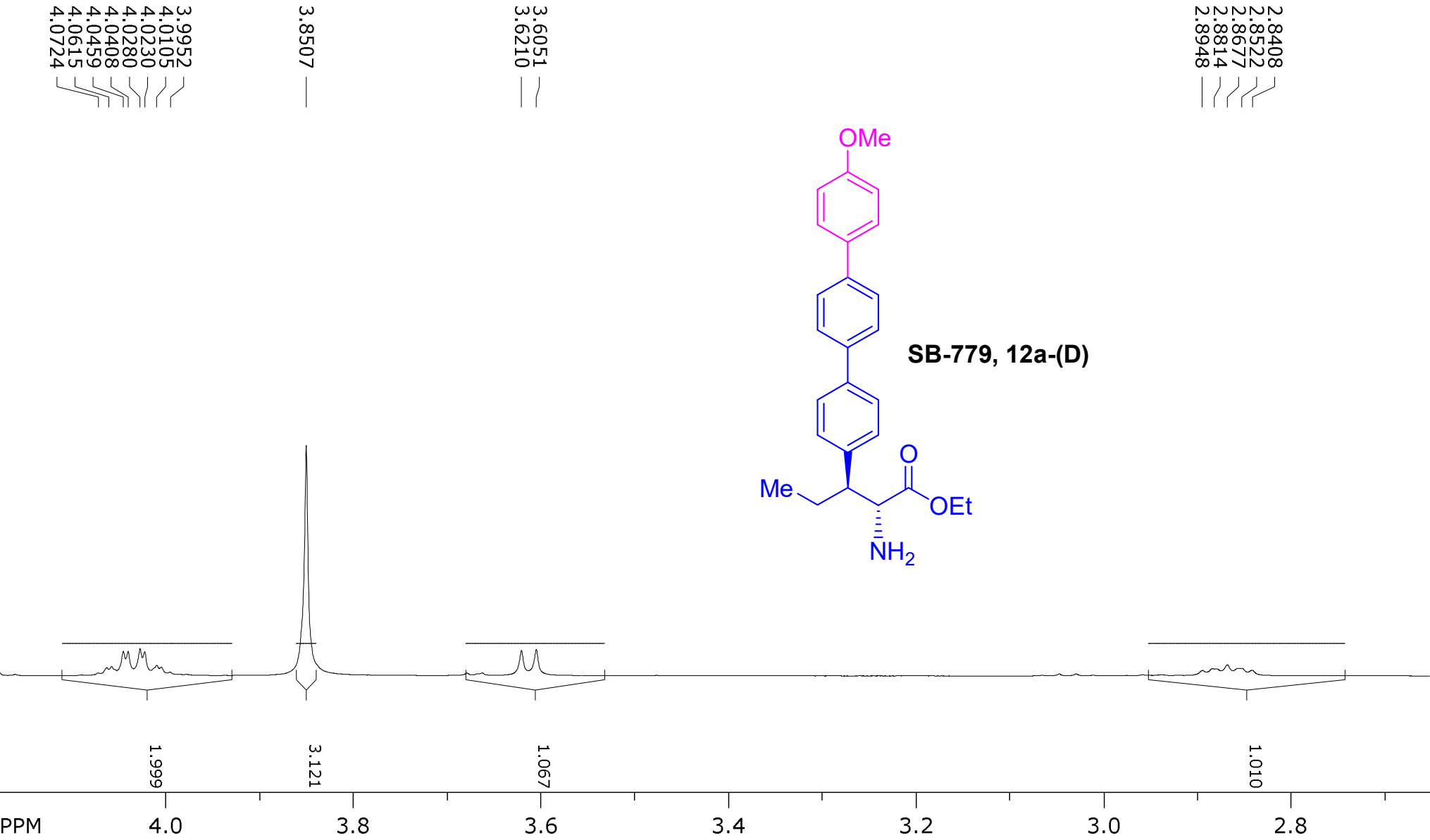




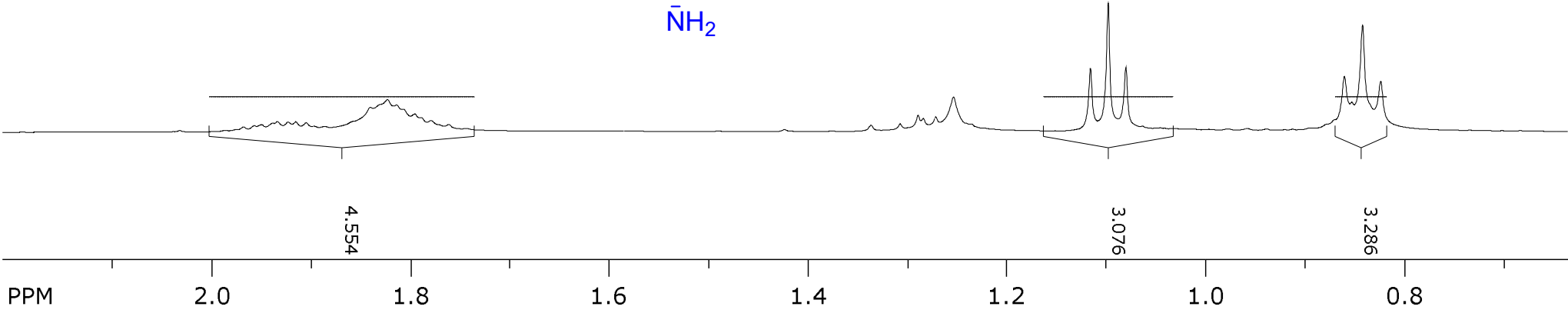
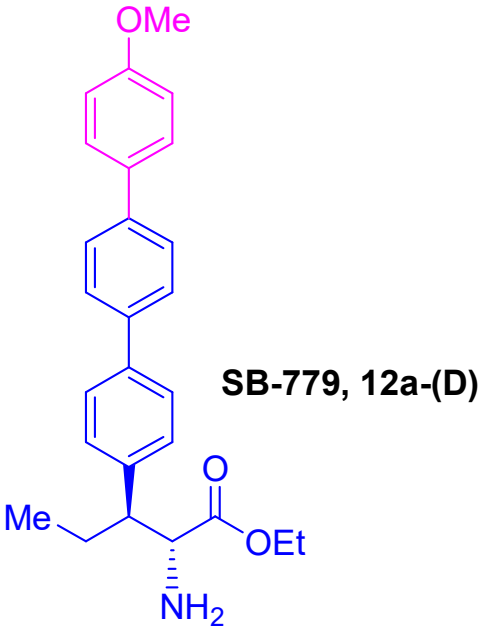


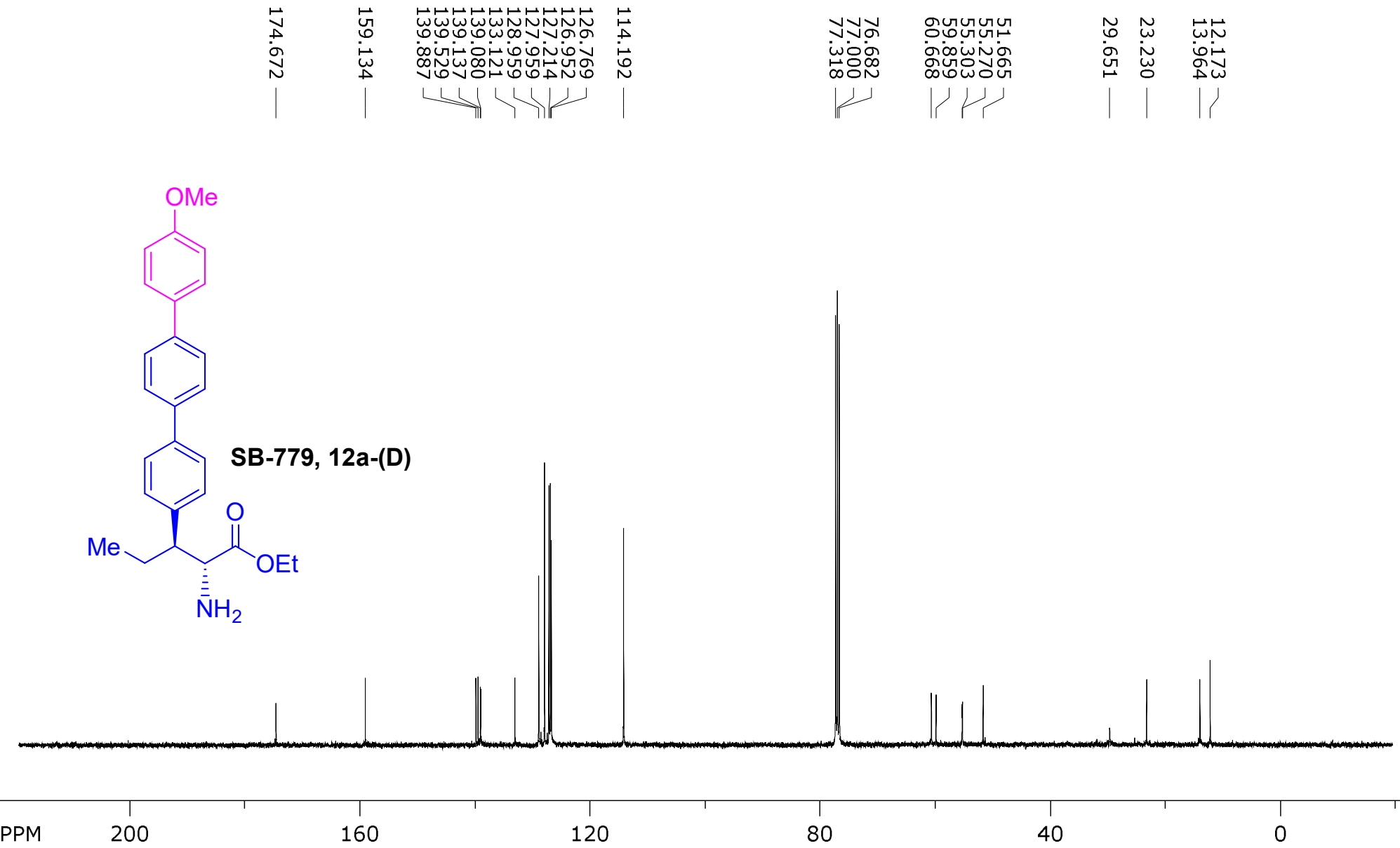


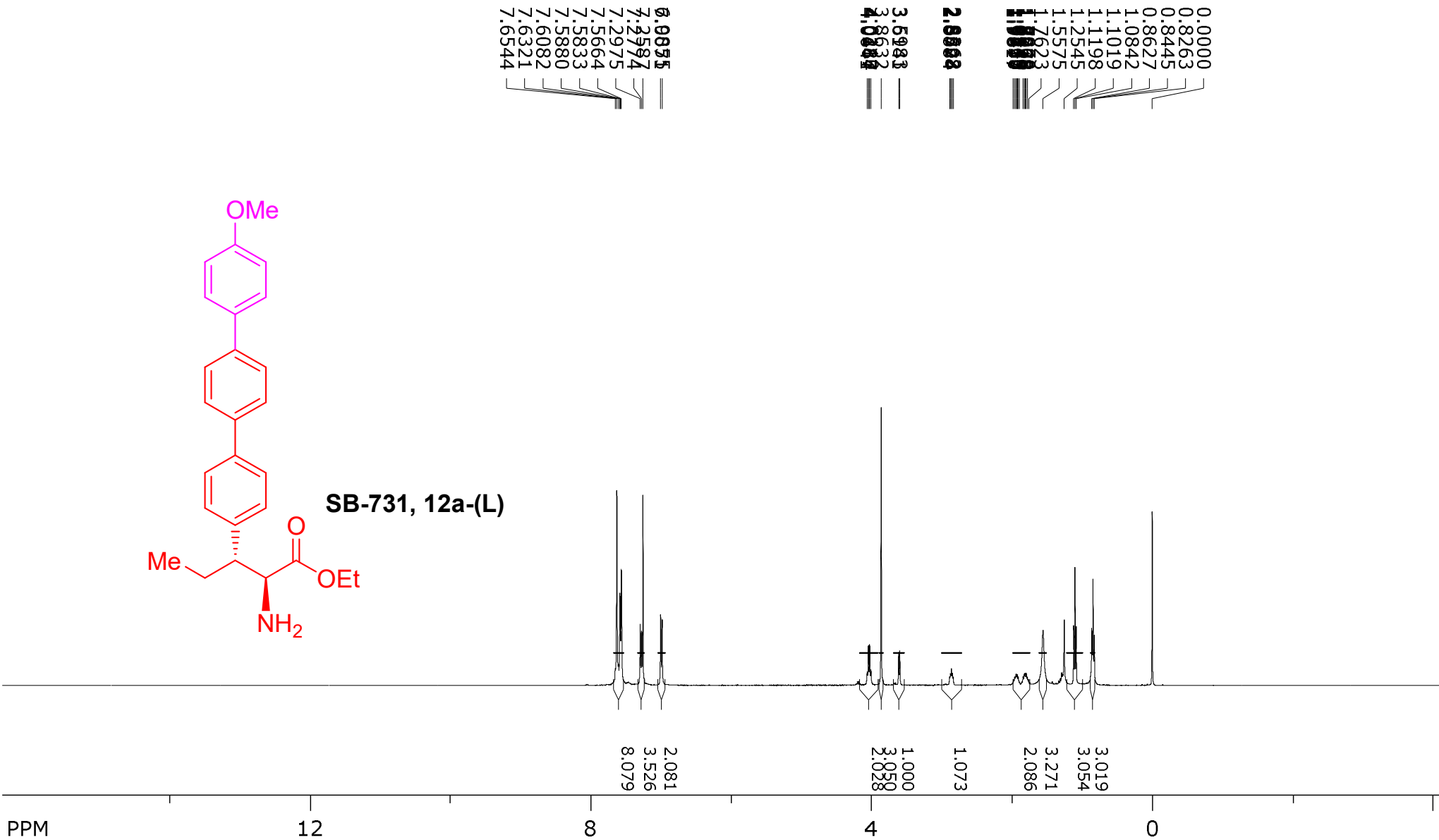


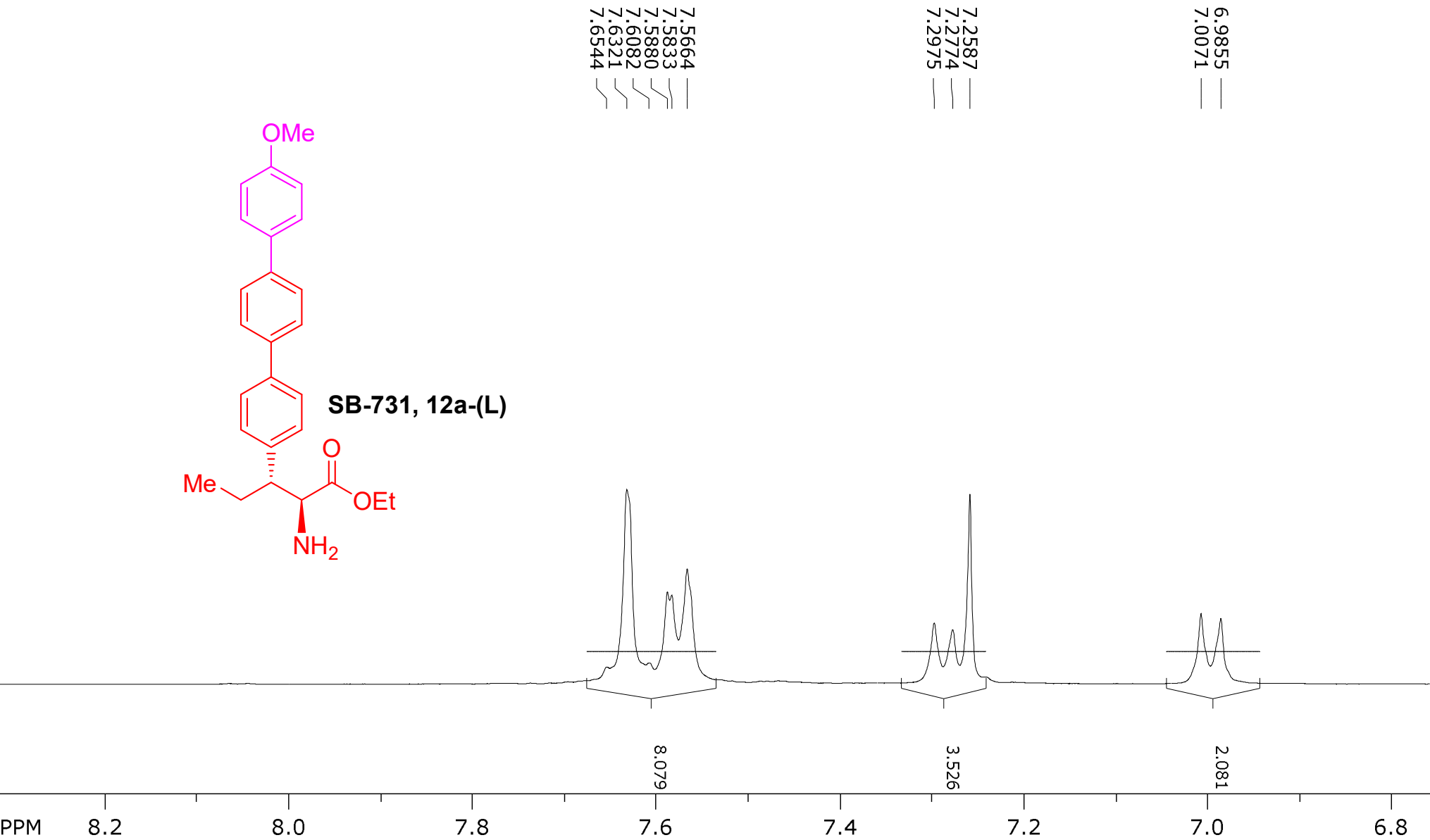


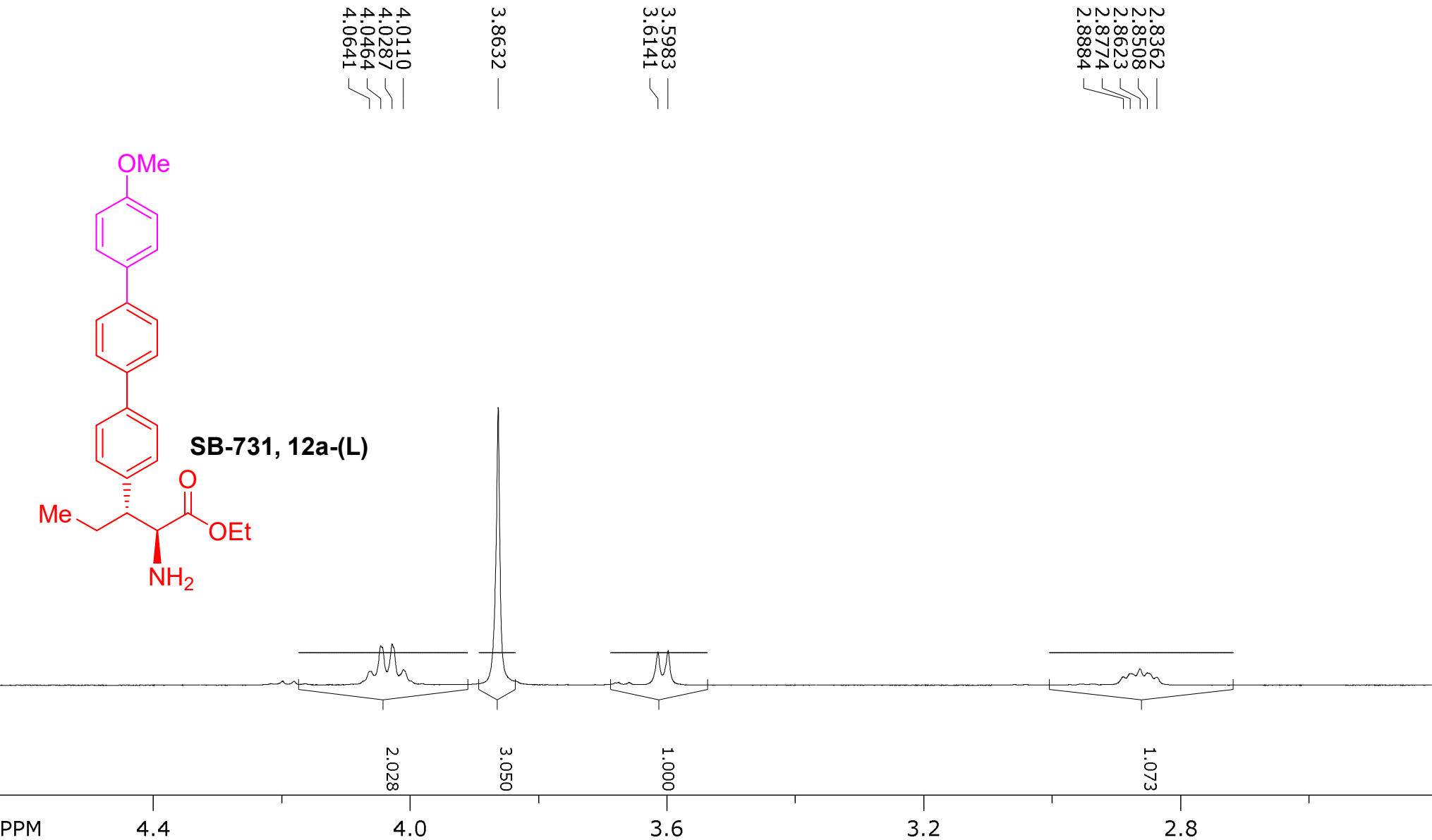
1.7625	1.2536	1.0801	0.8235
1.7787		1.0979	0.8418
1.7956		1.1157	0.8601
1.8144			
1.8235			
1.8408			
1.8997			
1.9159			
1.9349			
1.9496			
1.9701			

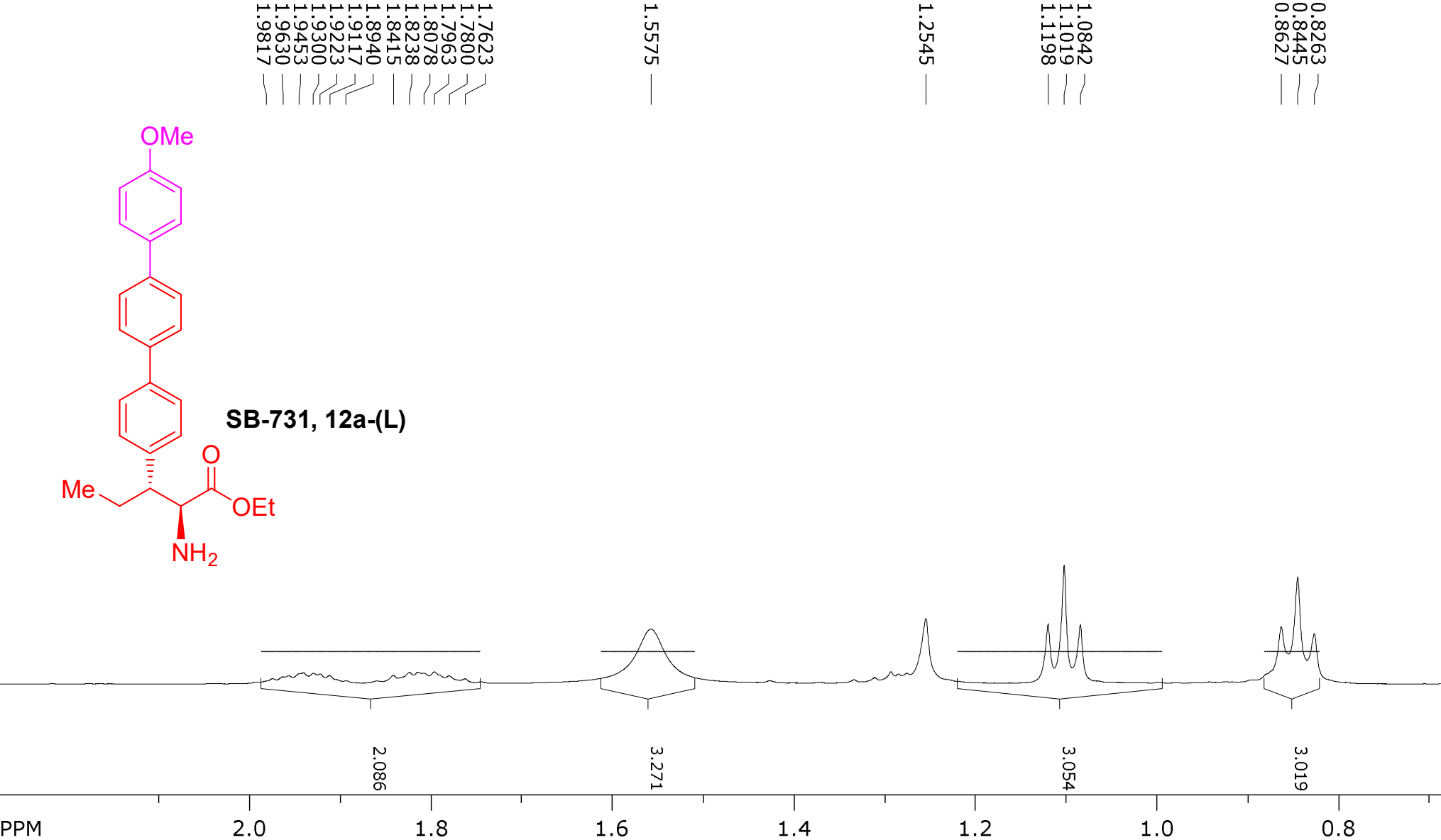


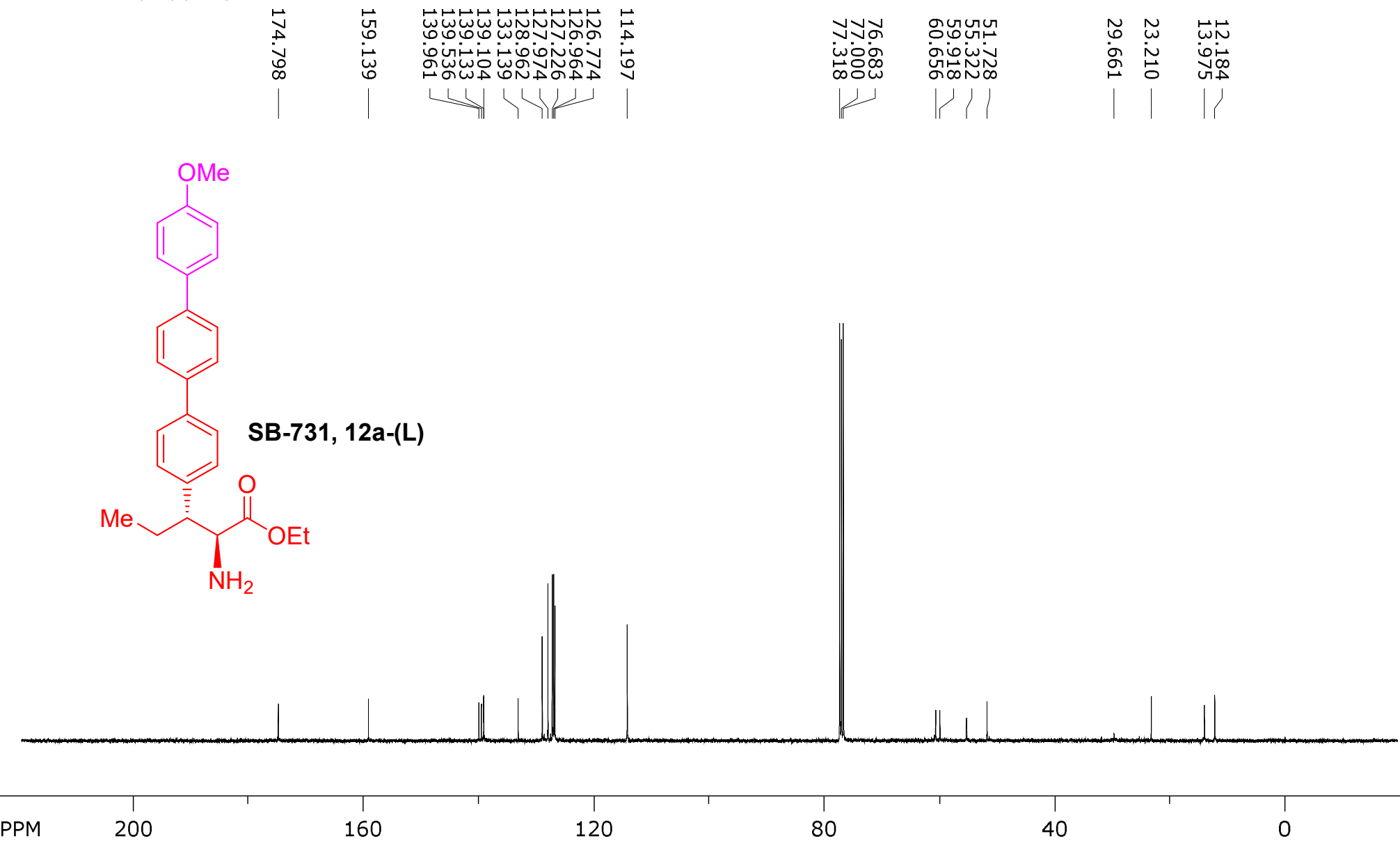


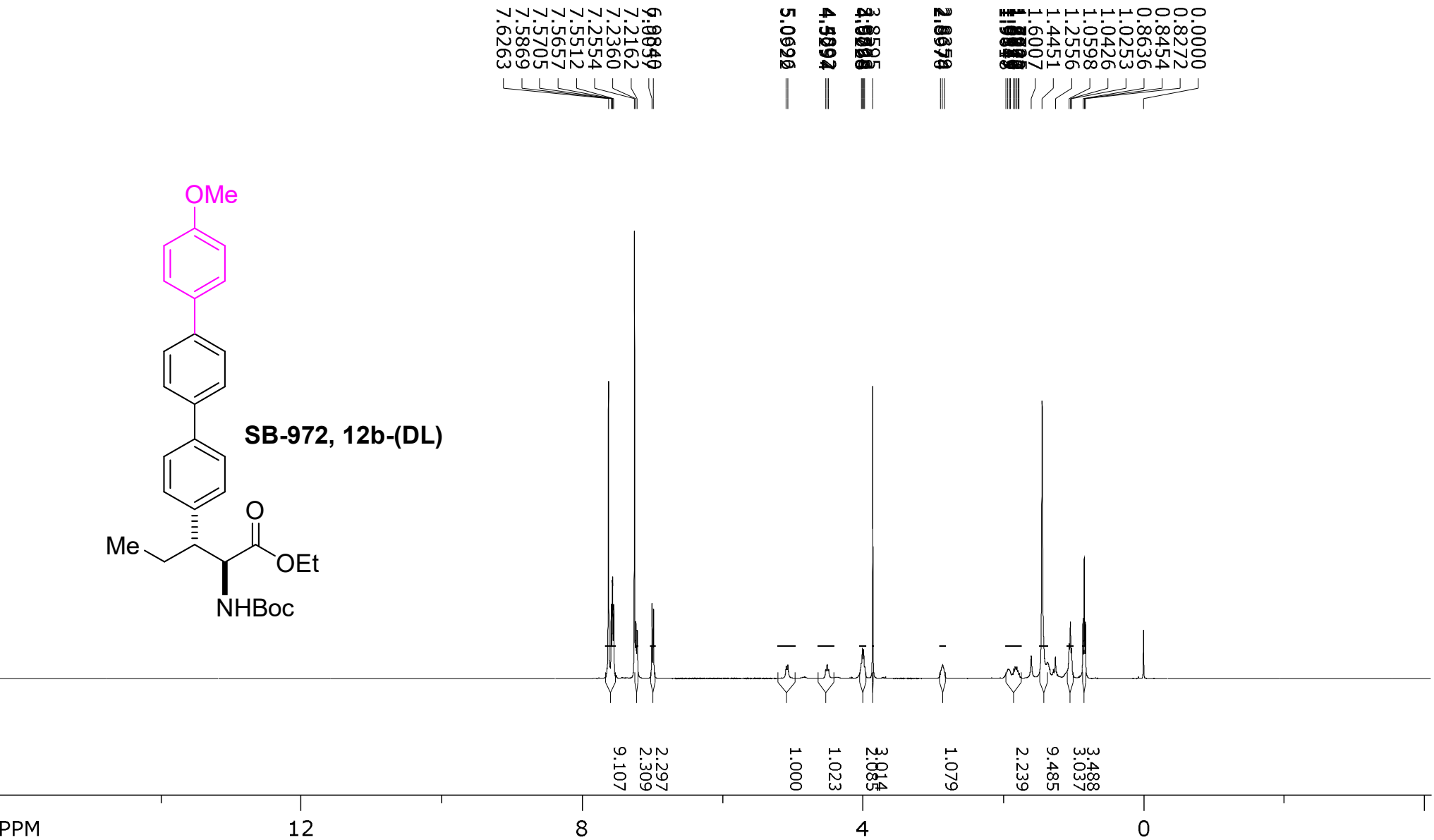


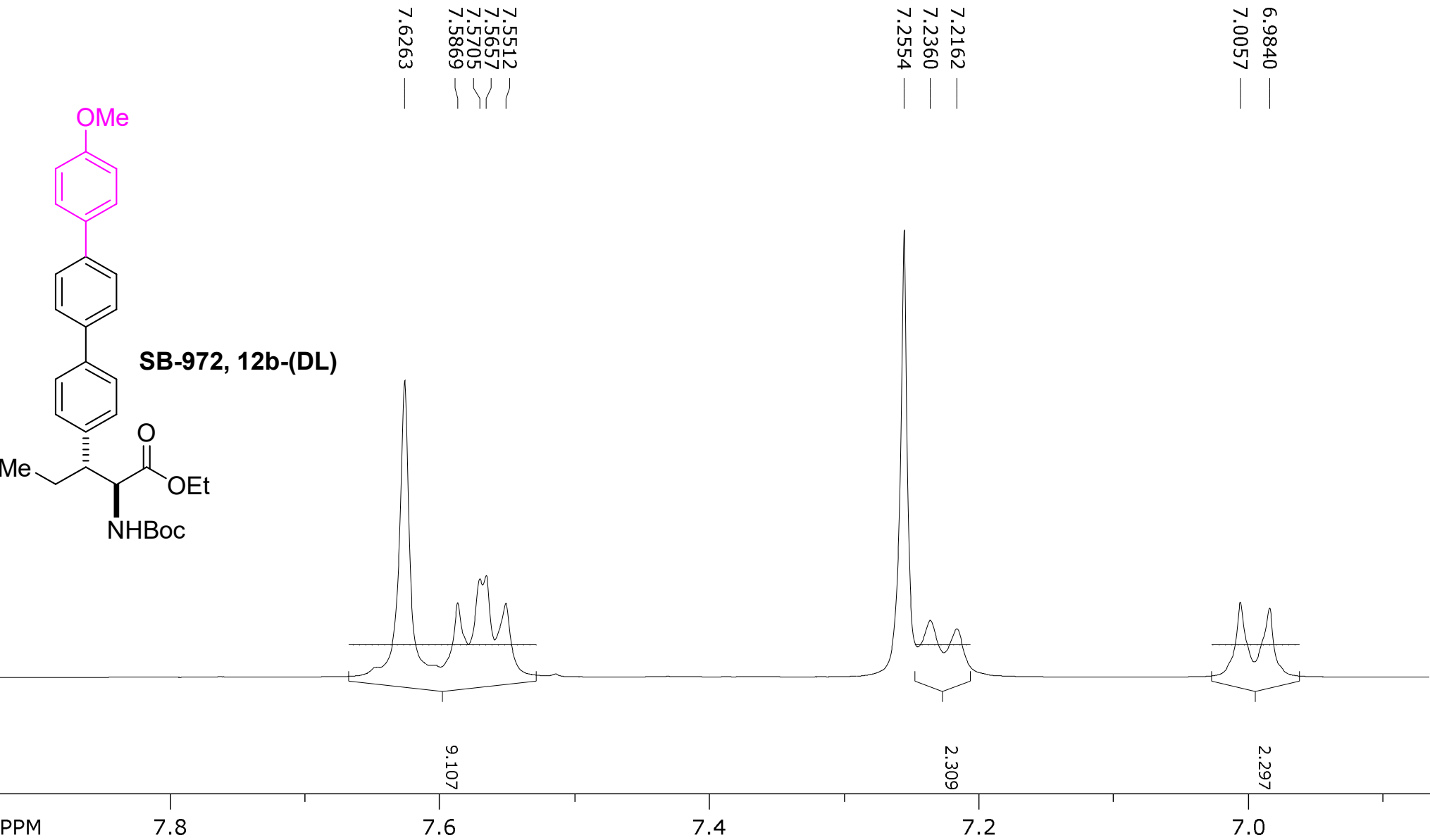


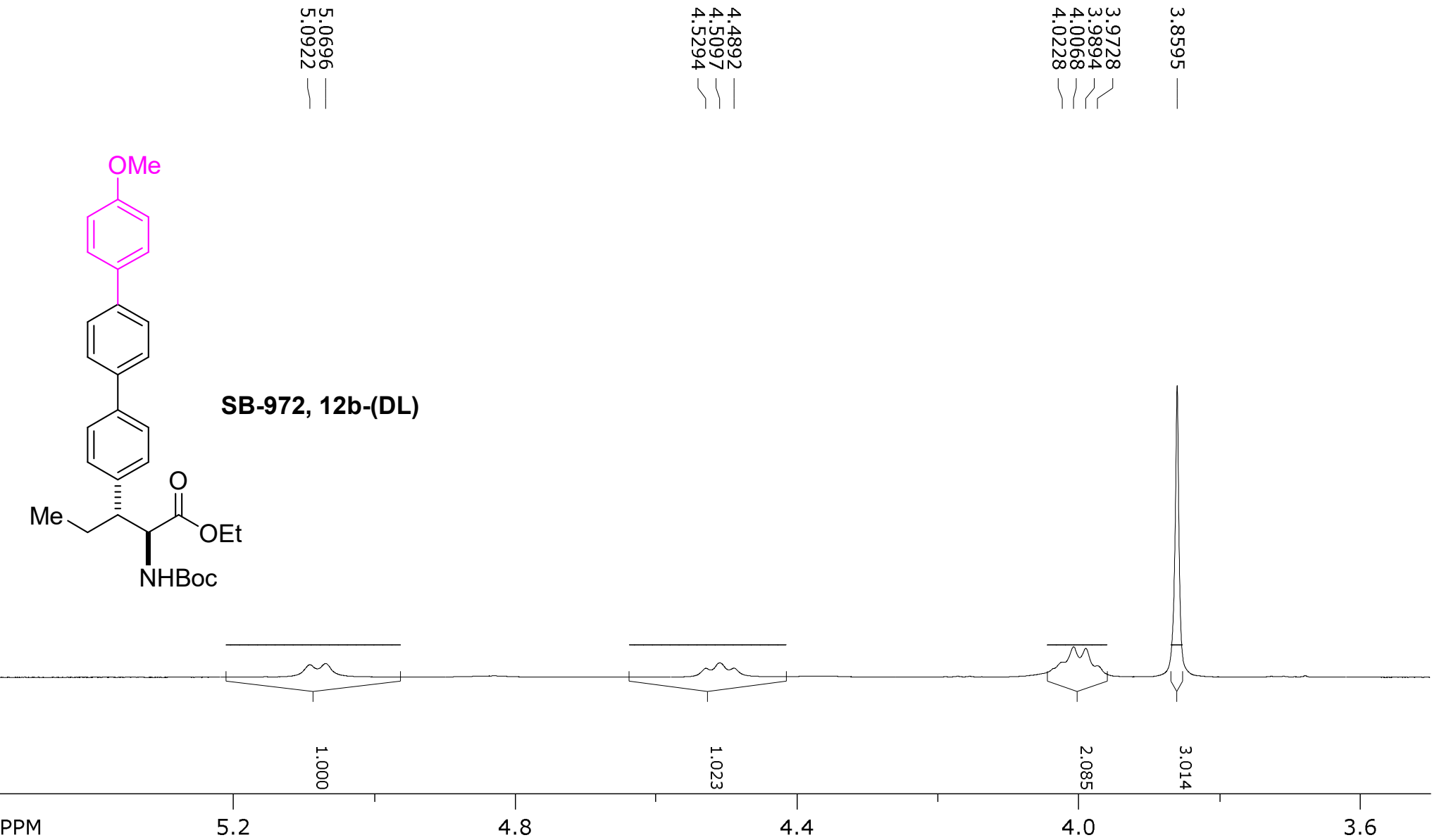


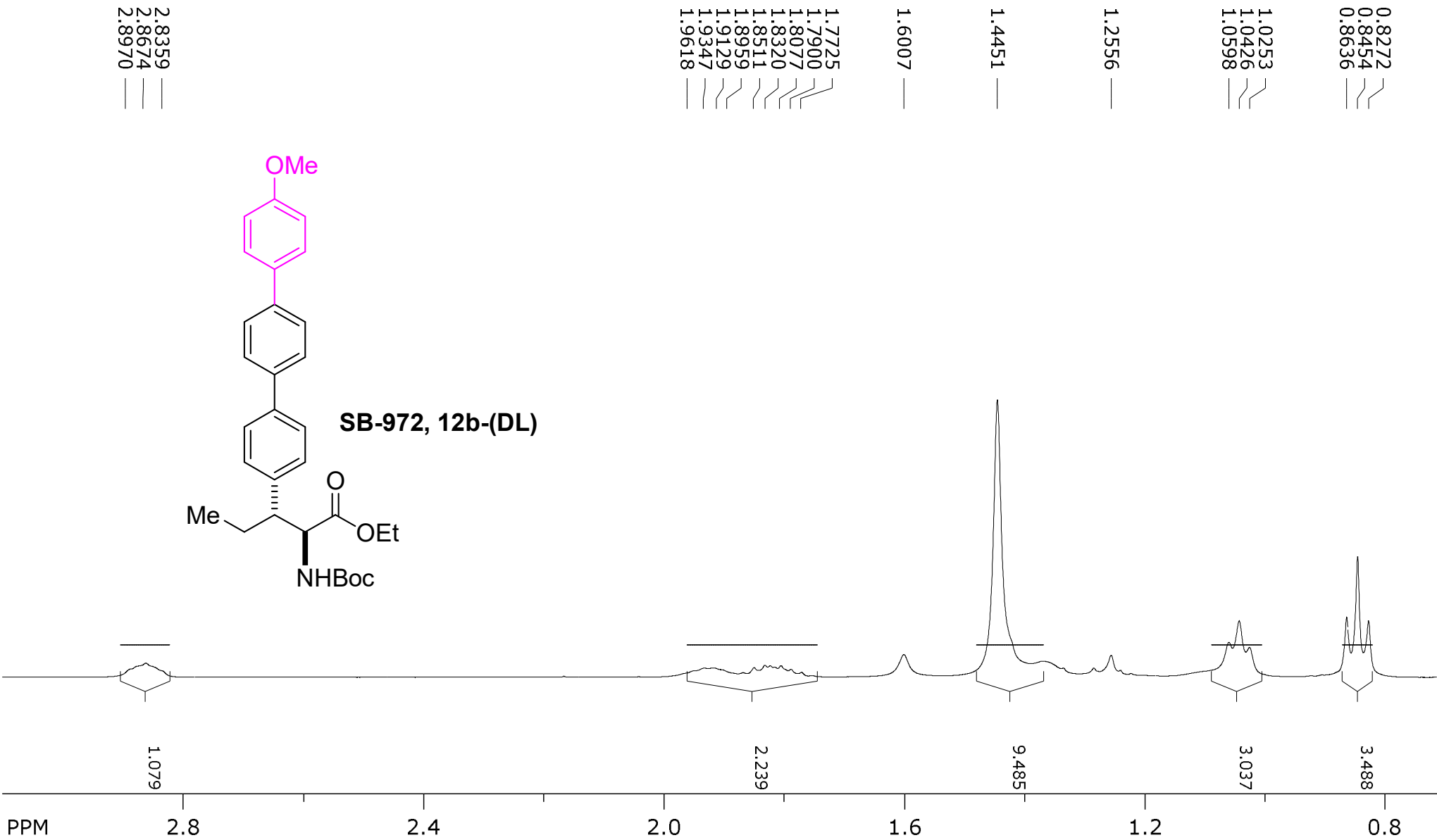


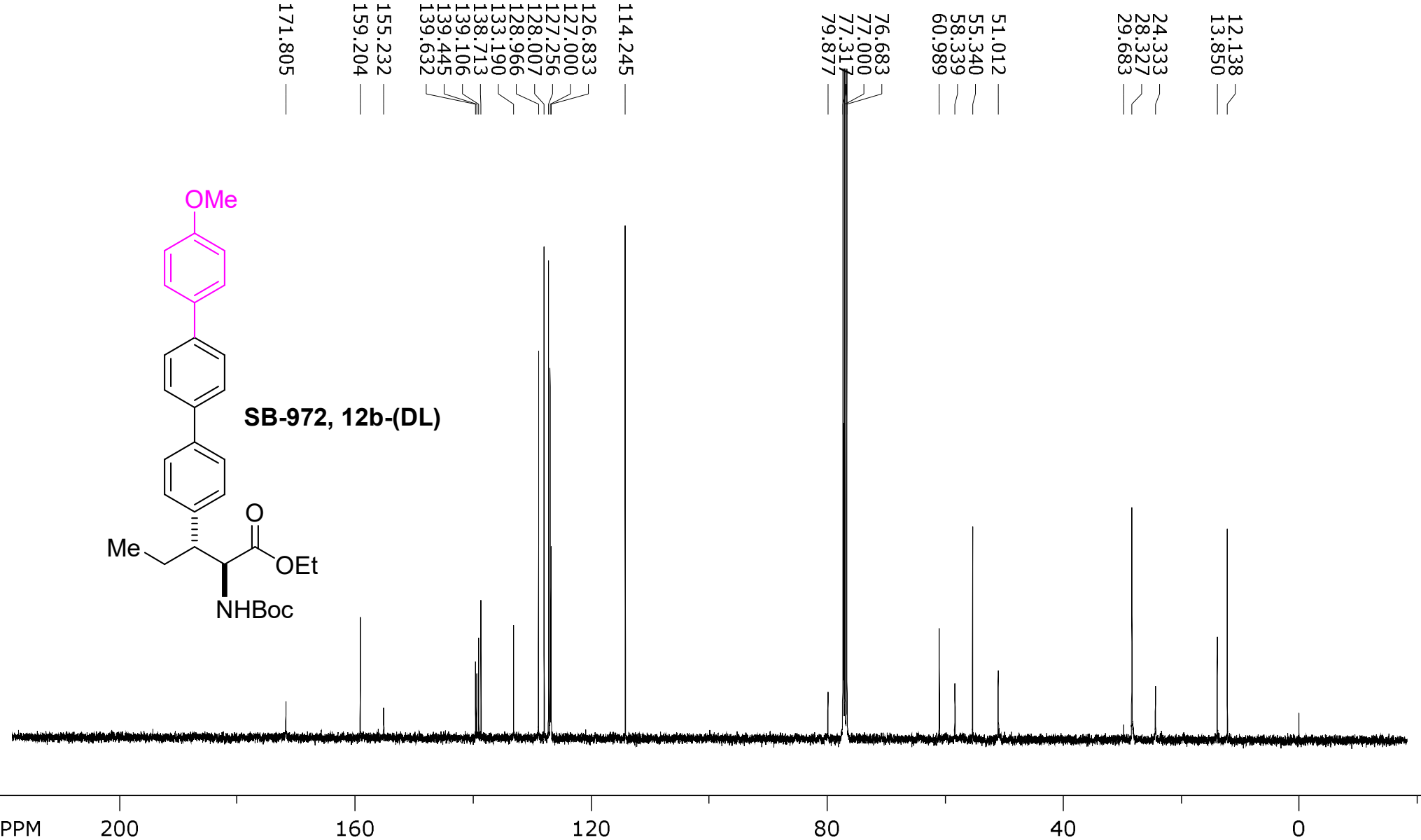


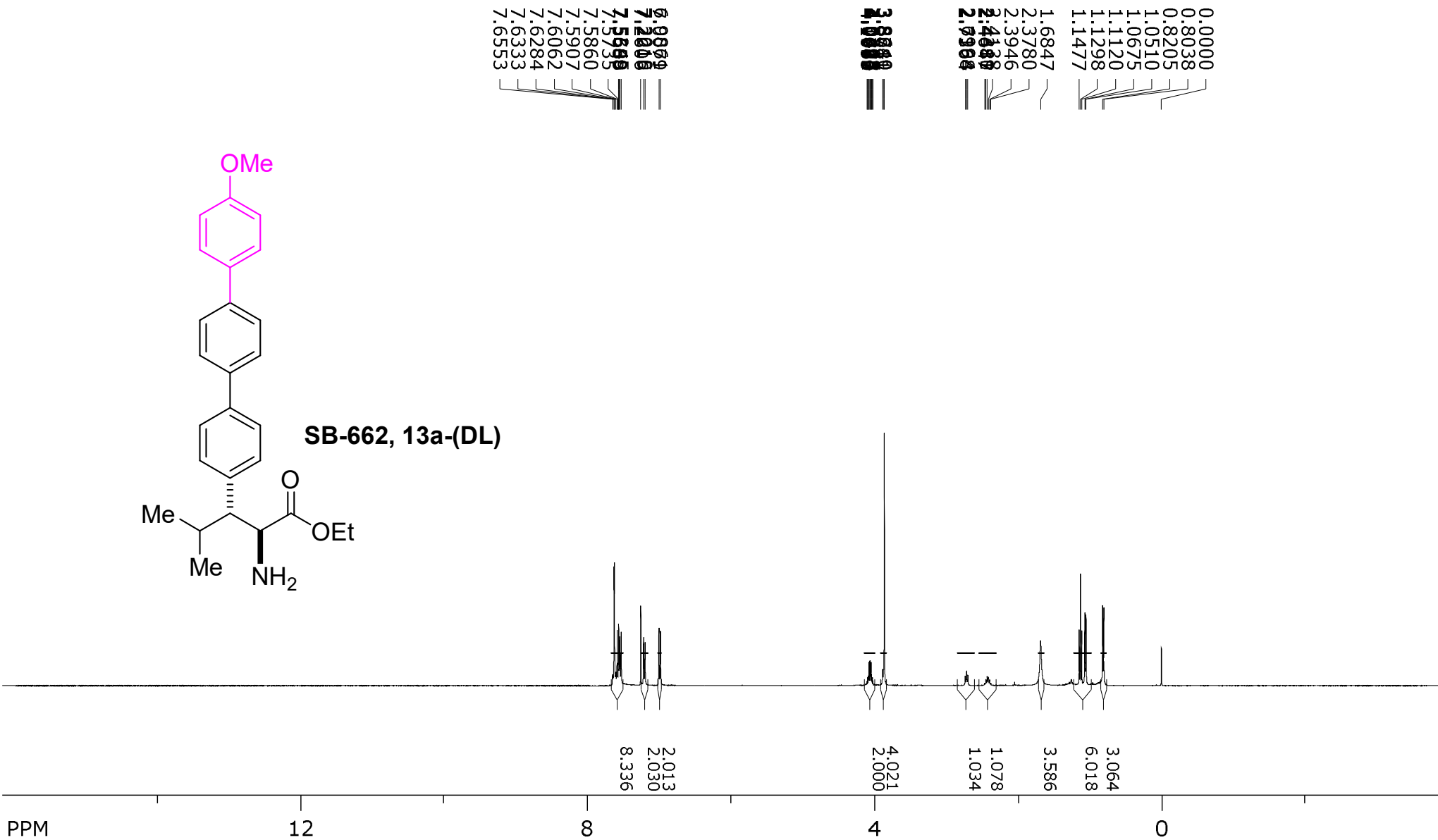


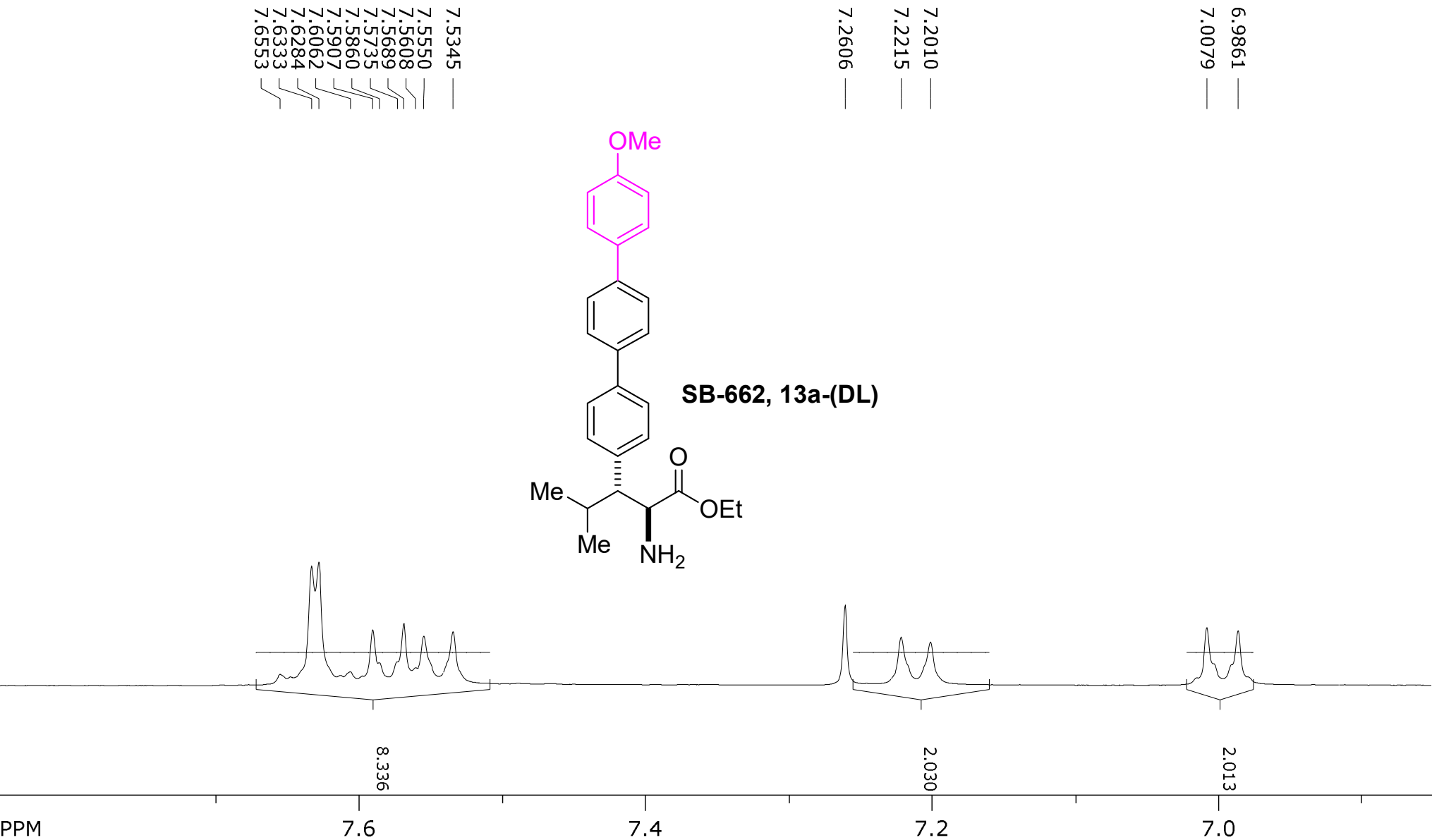


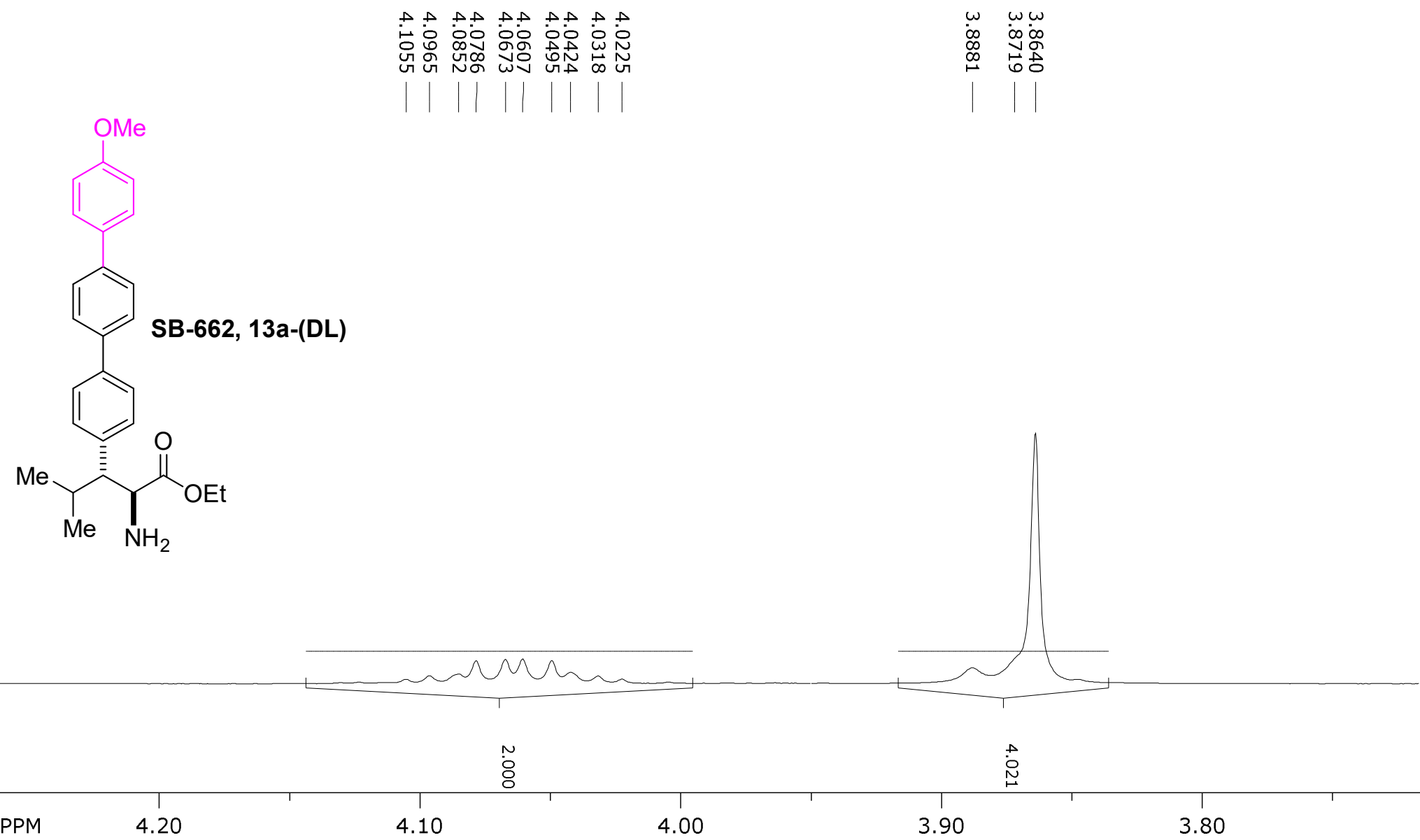


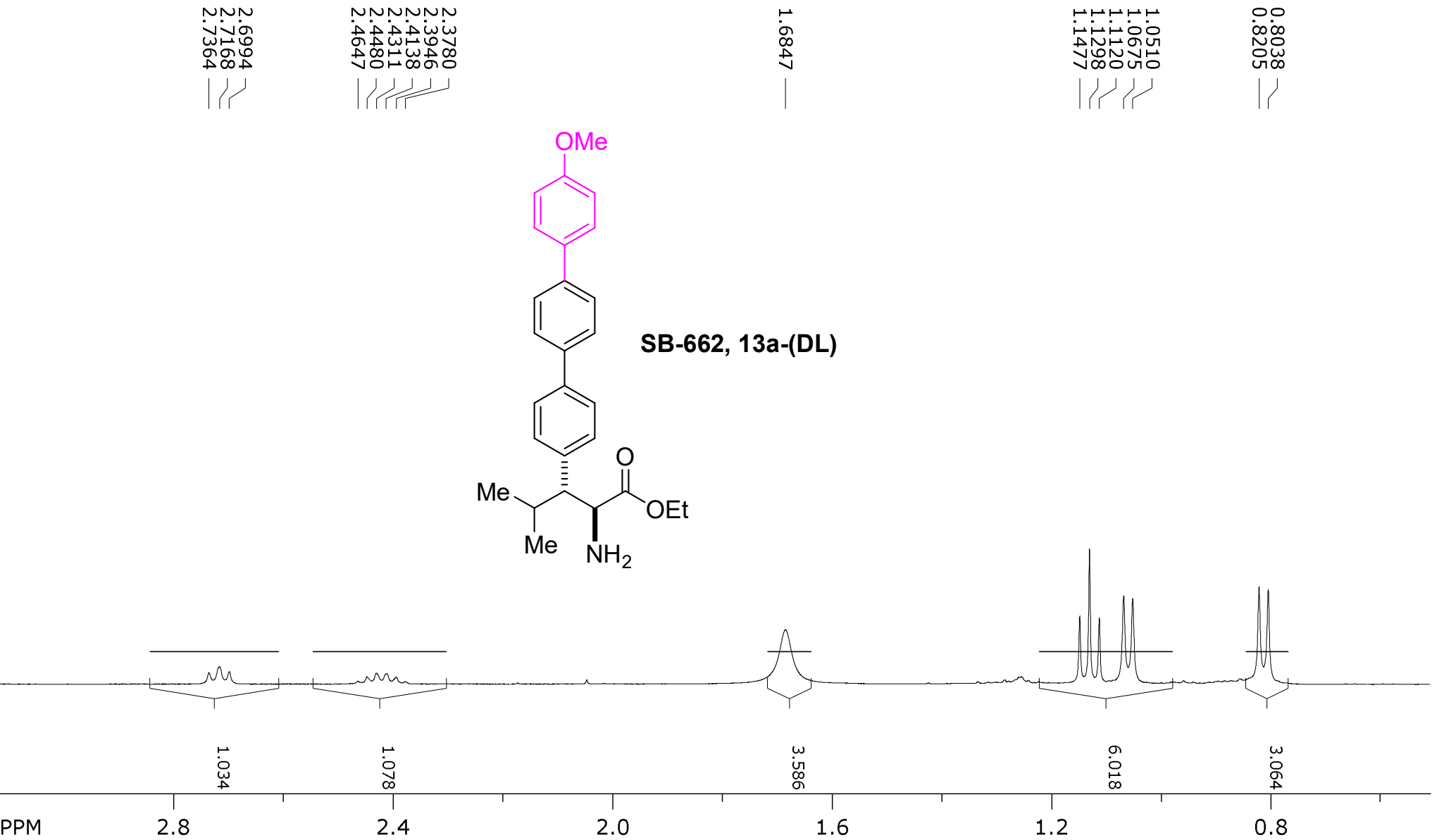


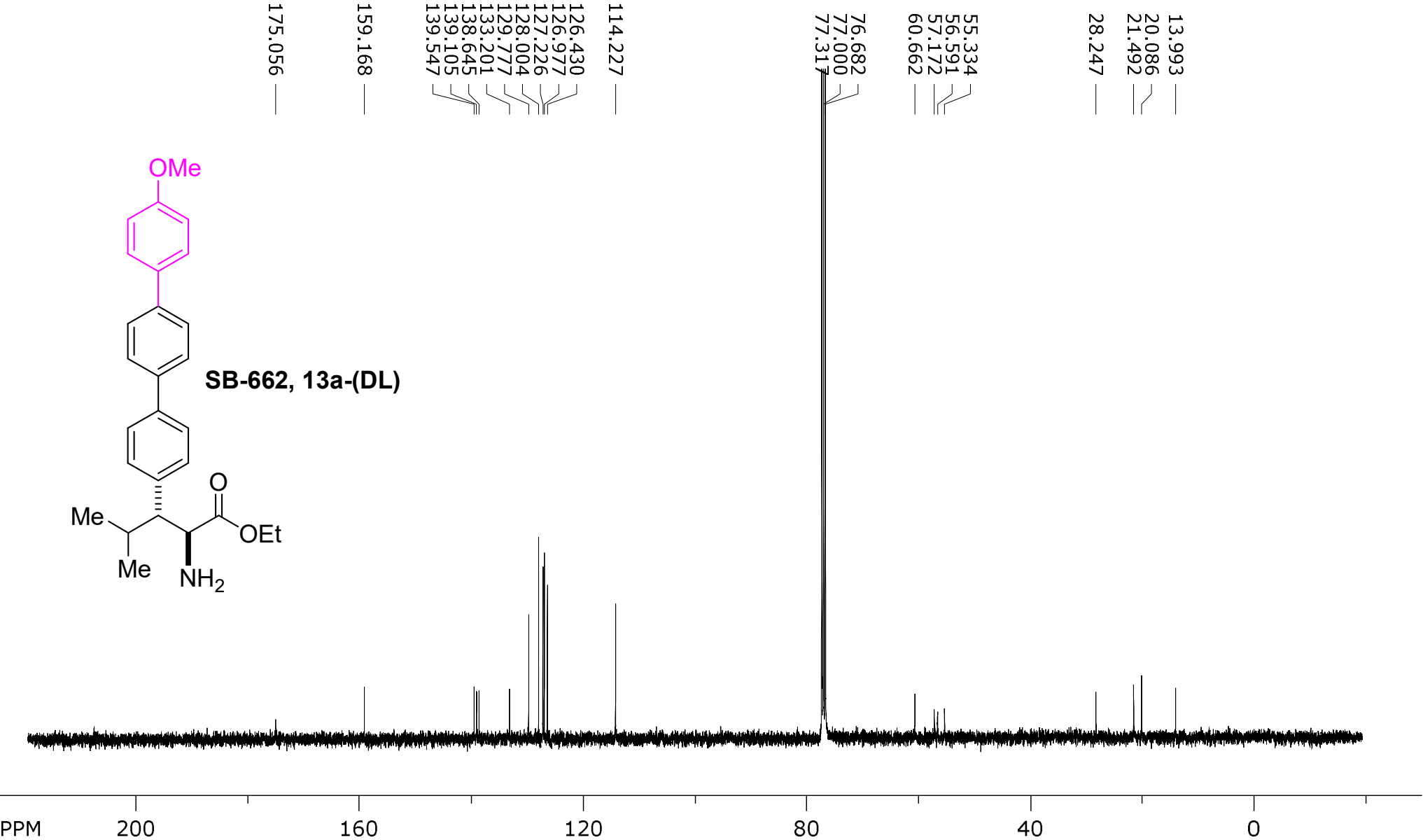


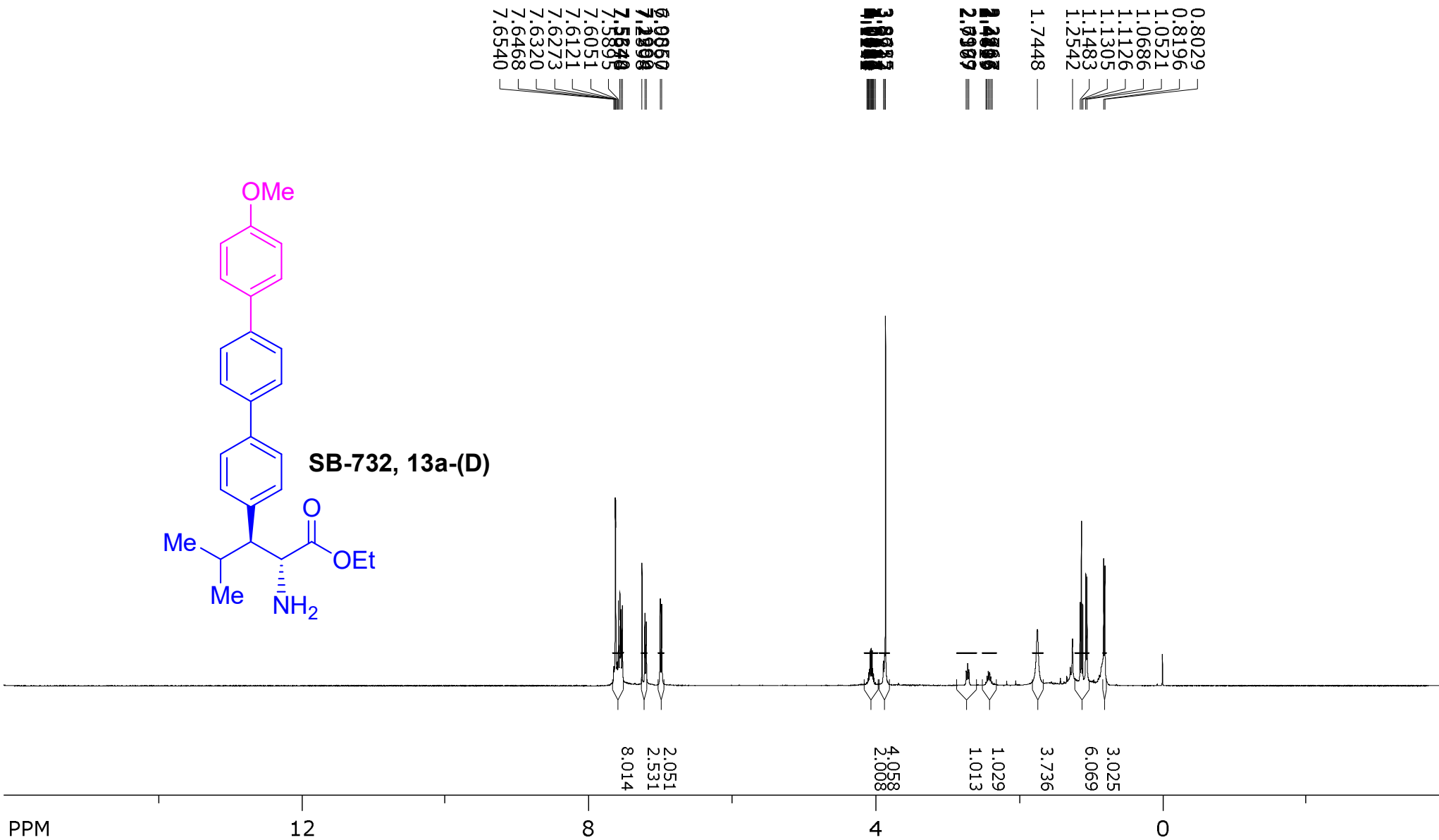


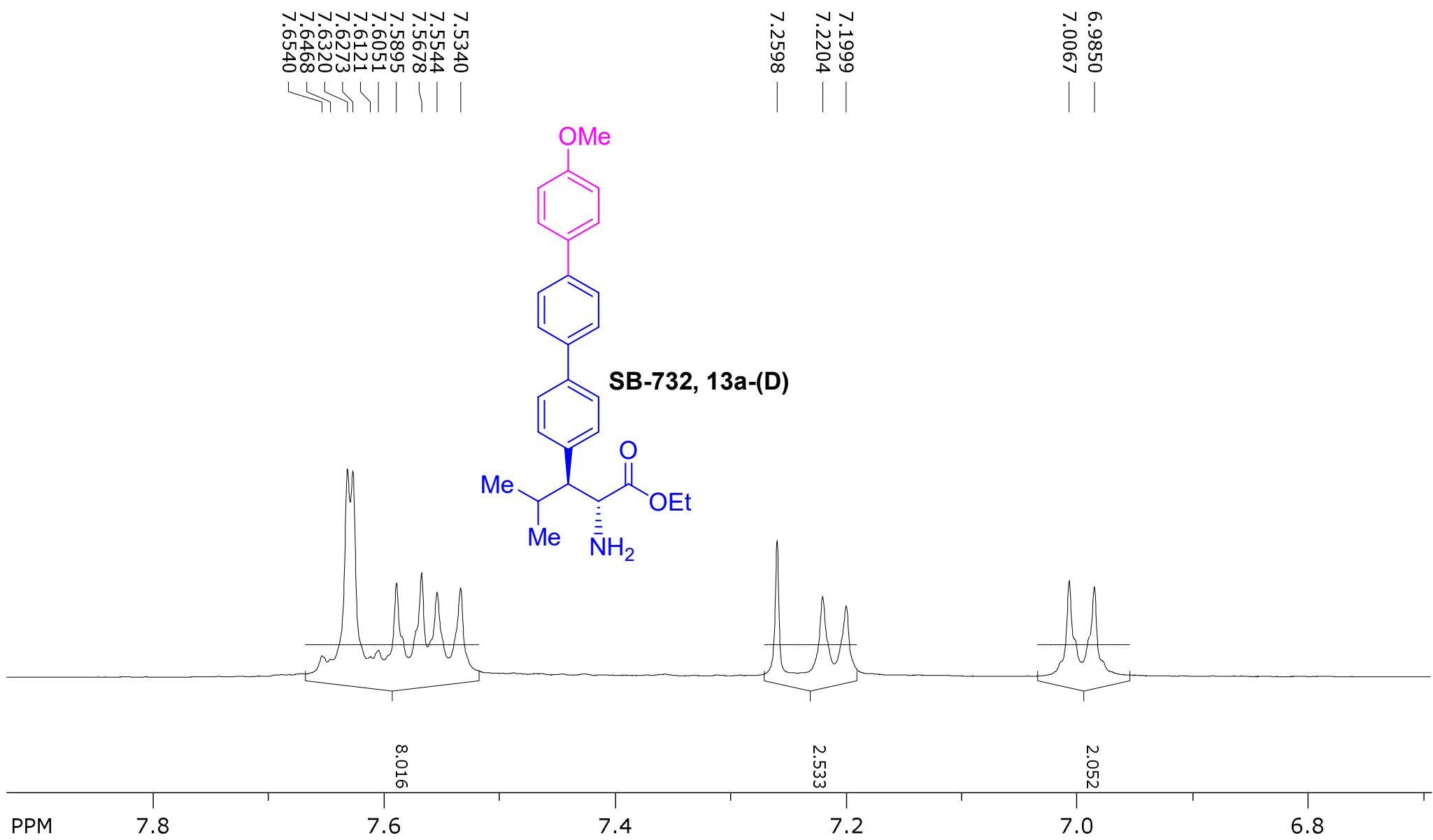


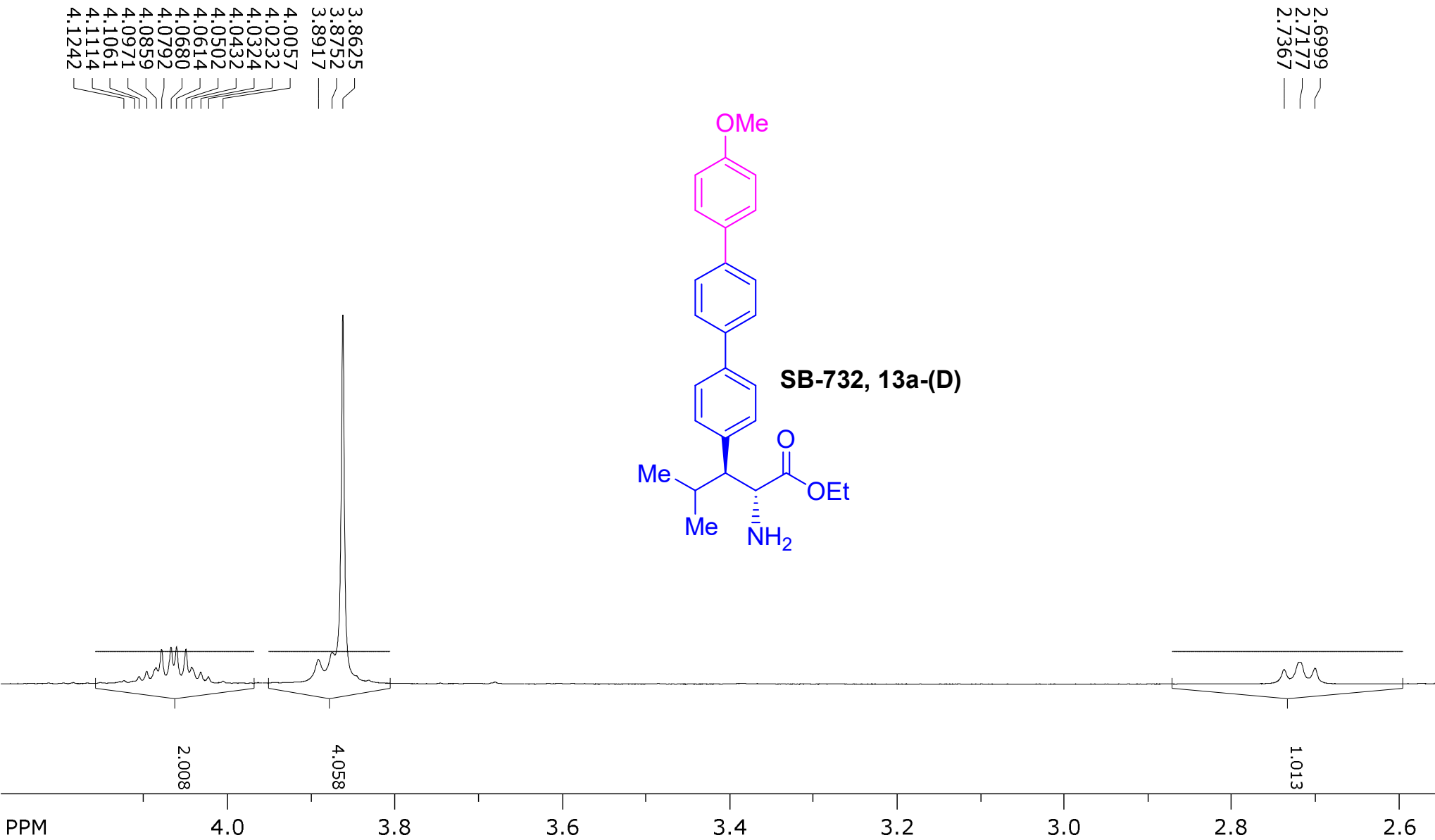


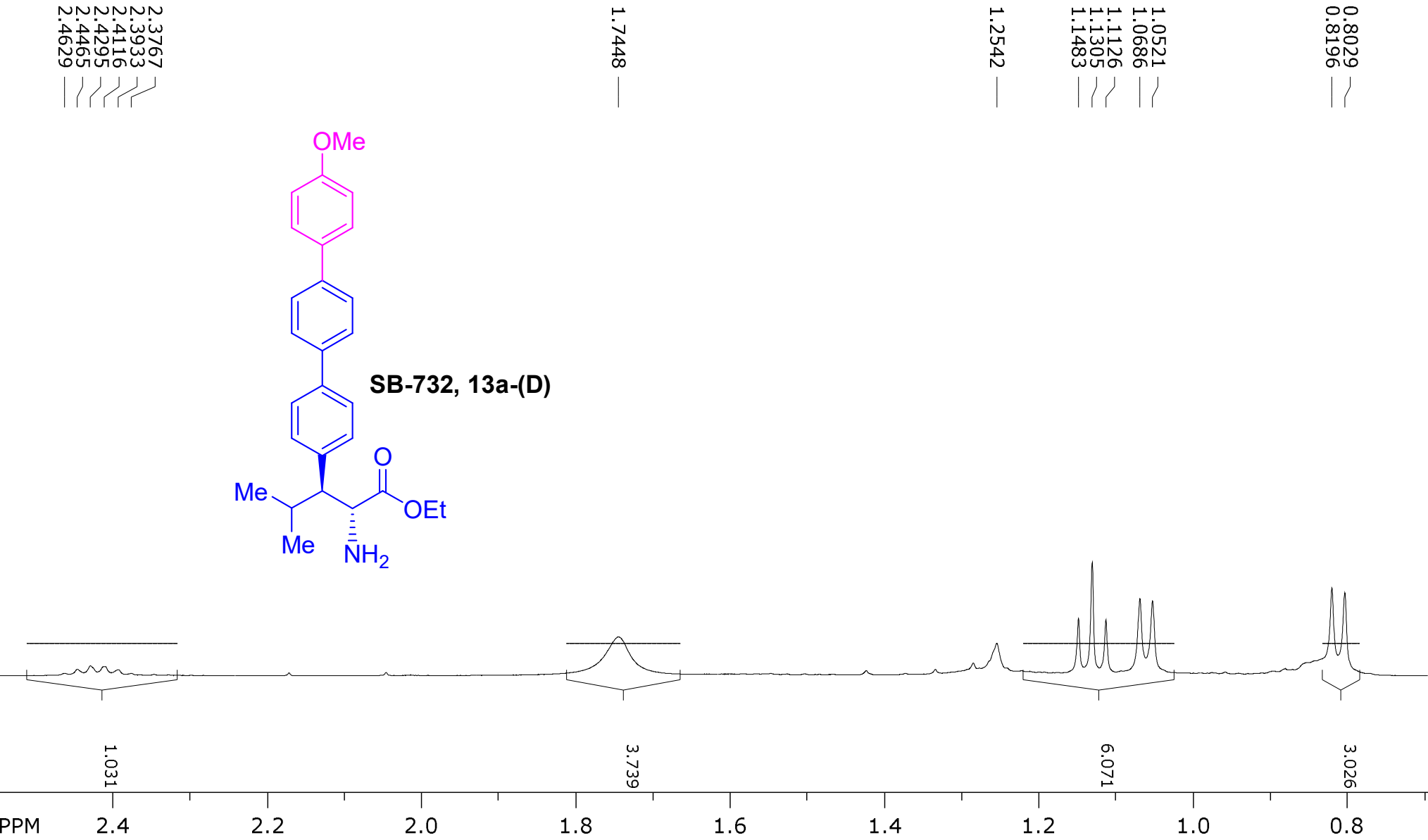


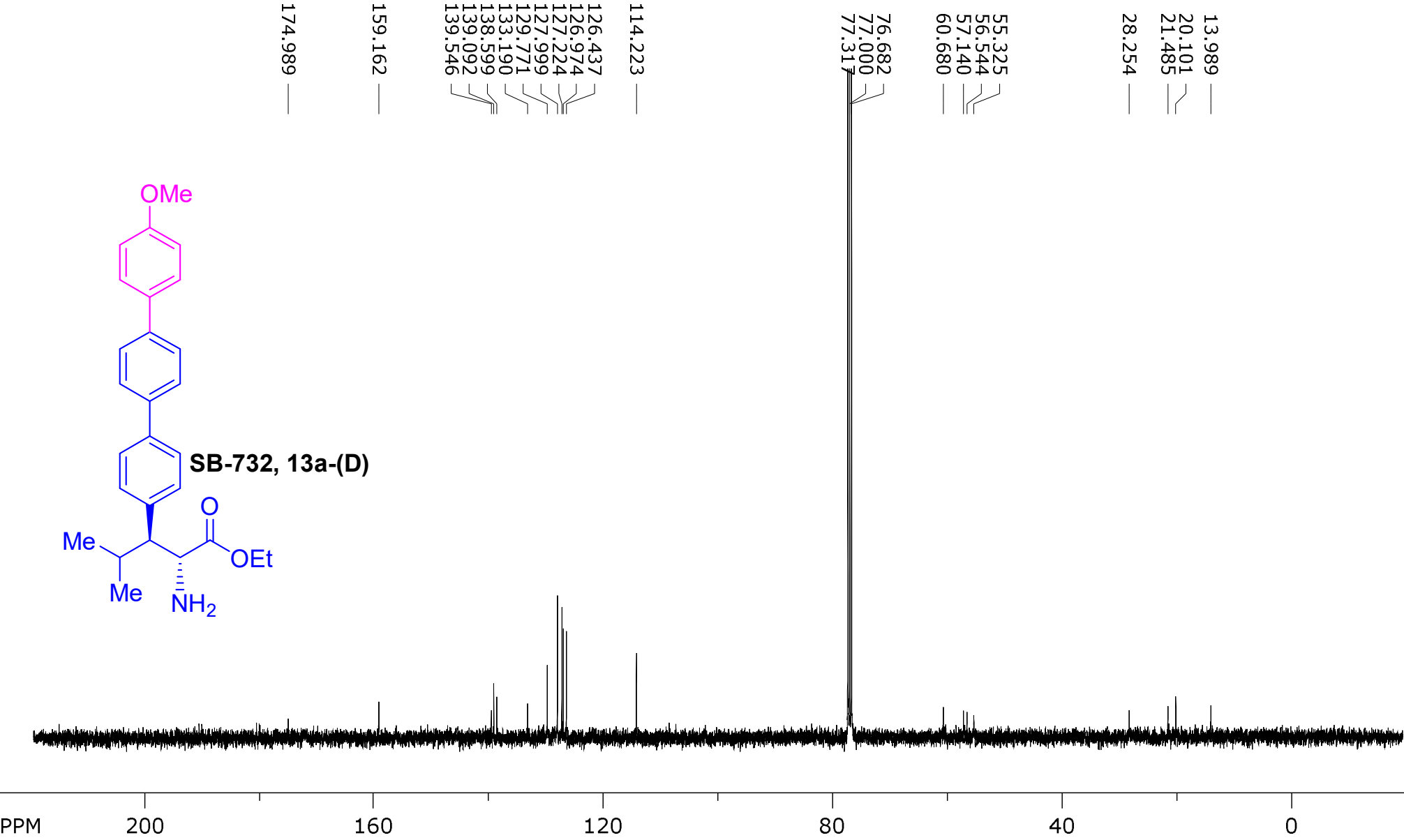


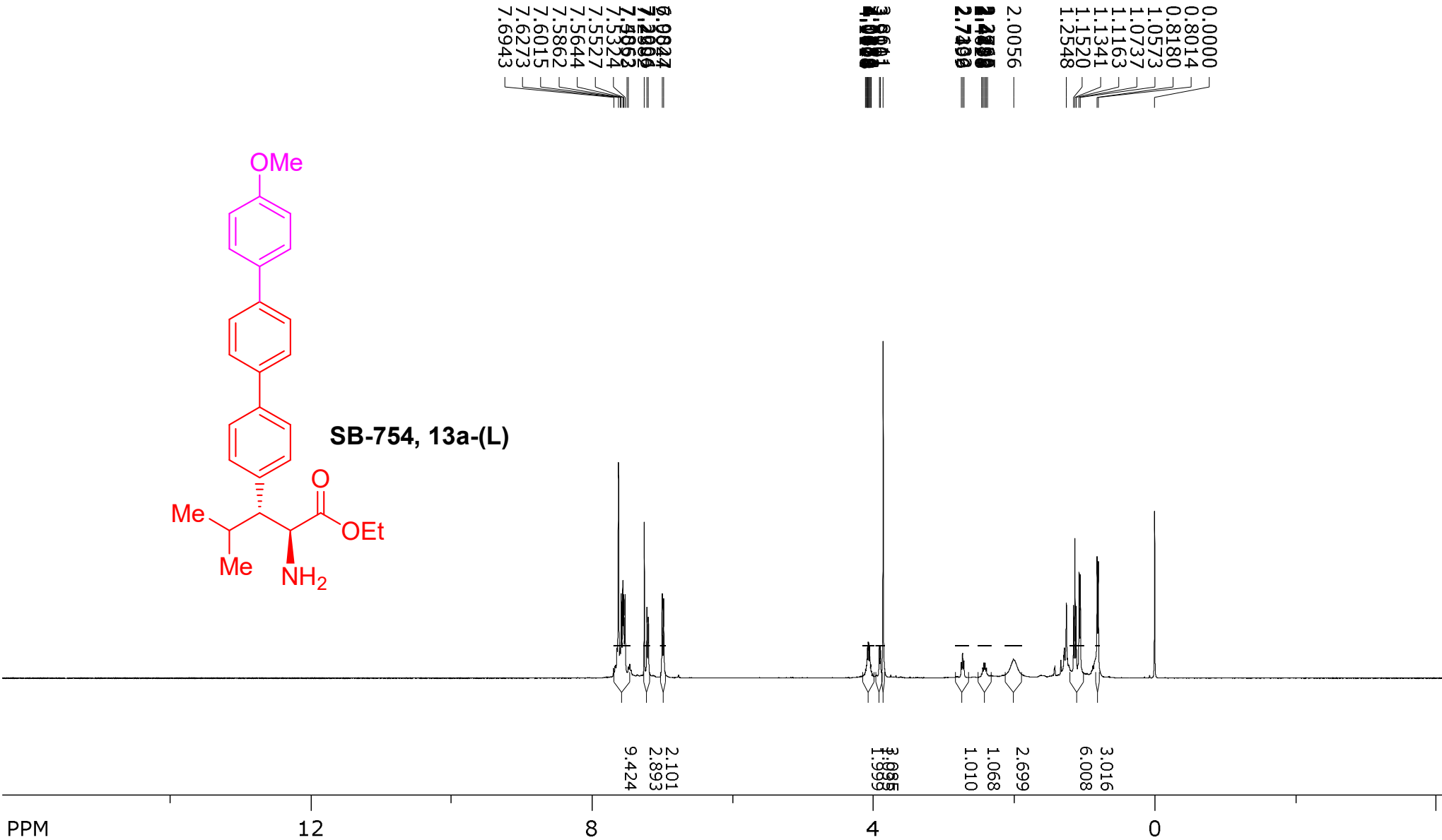


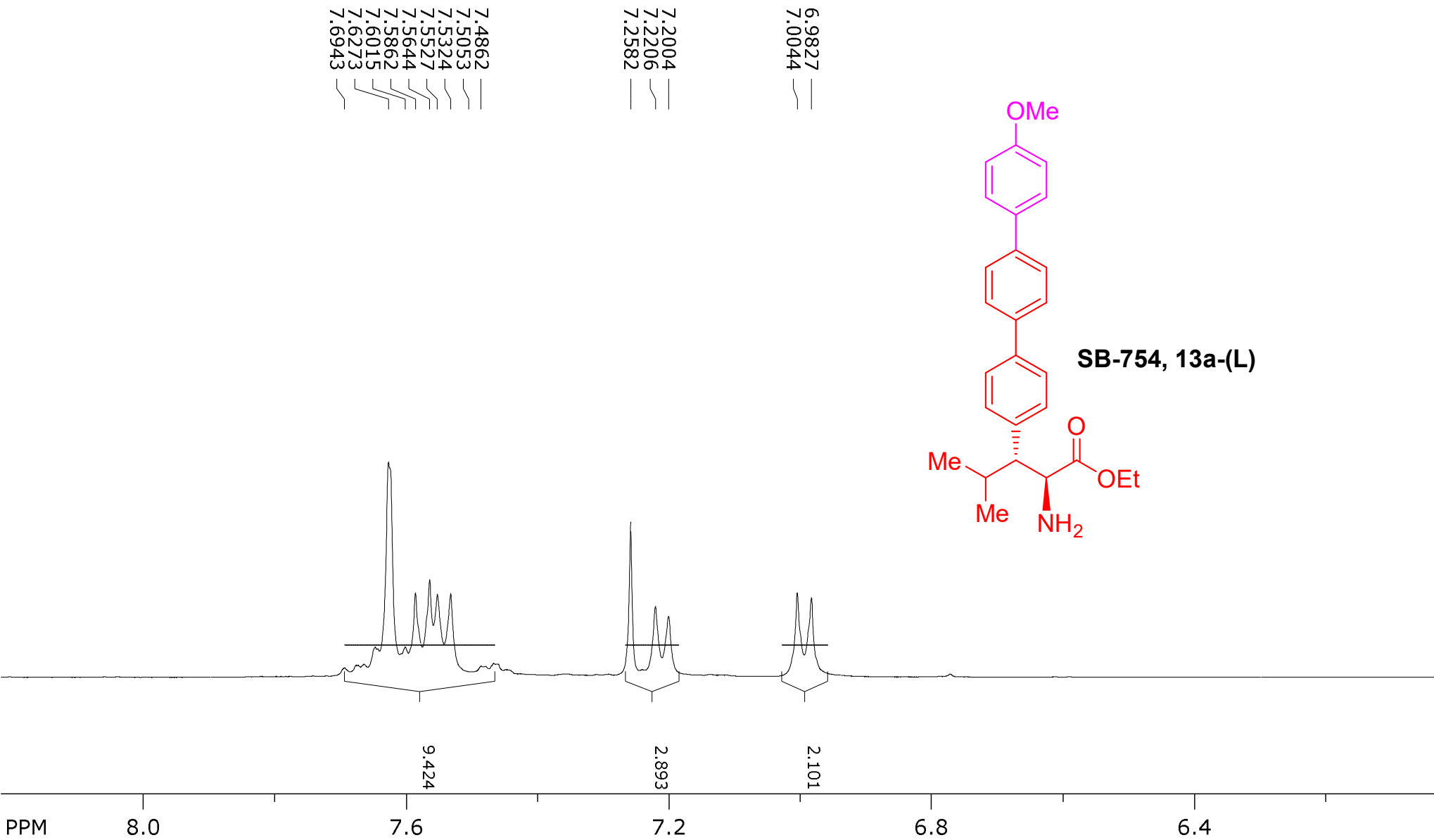


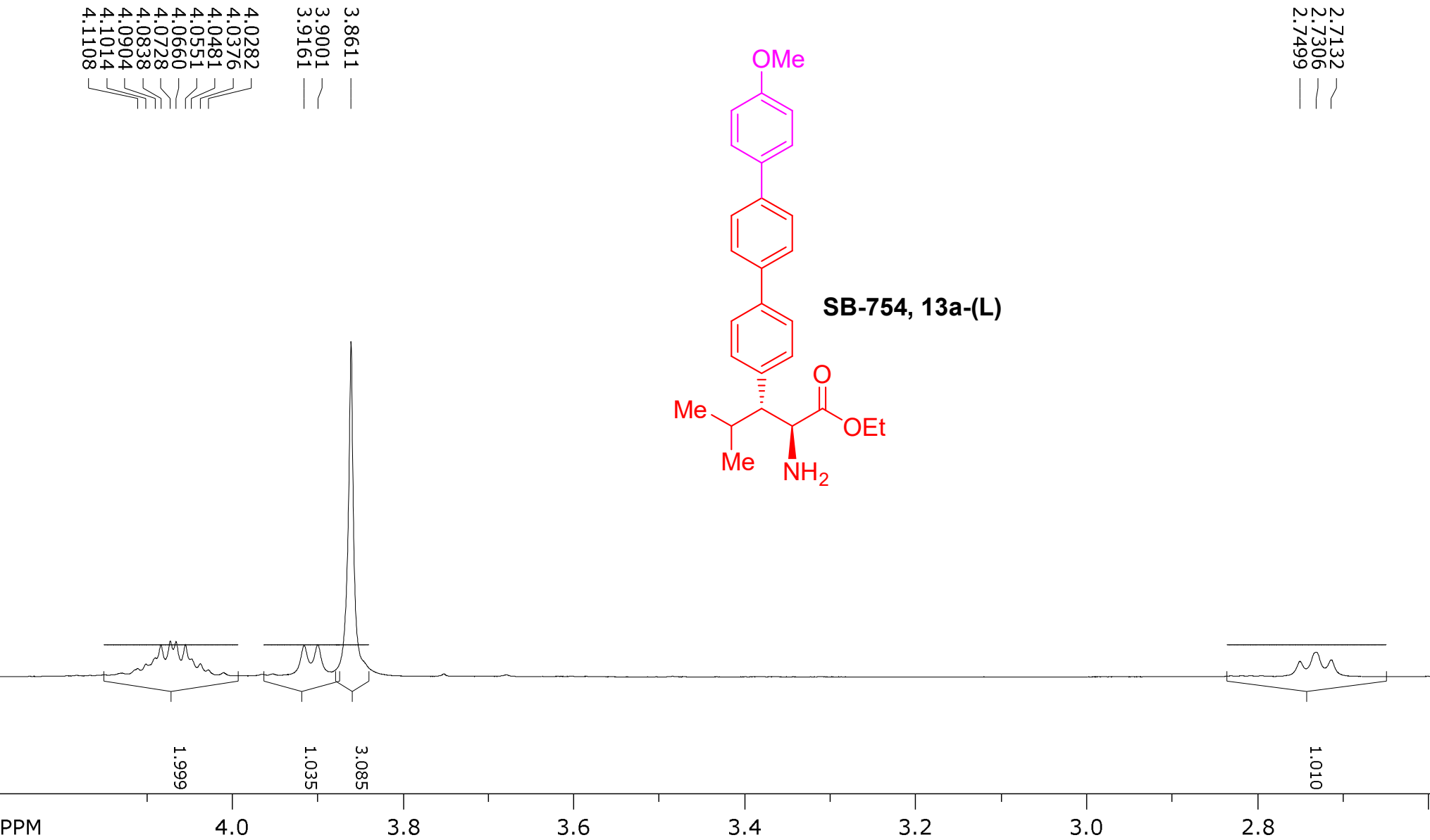


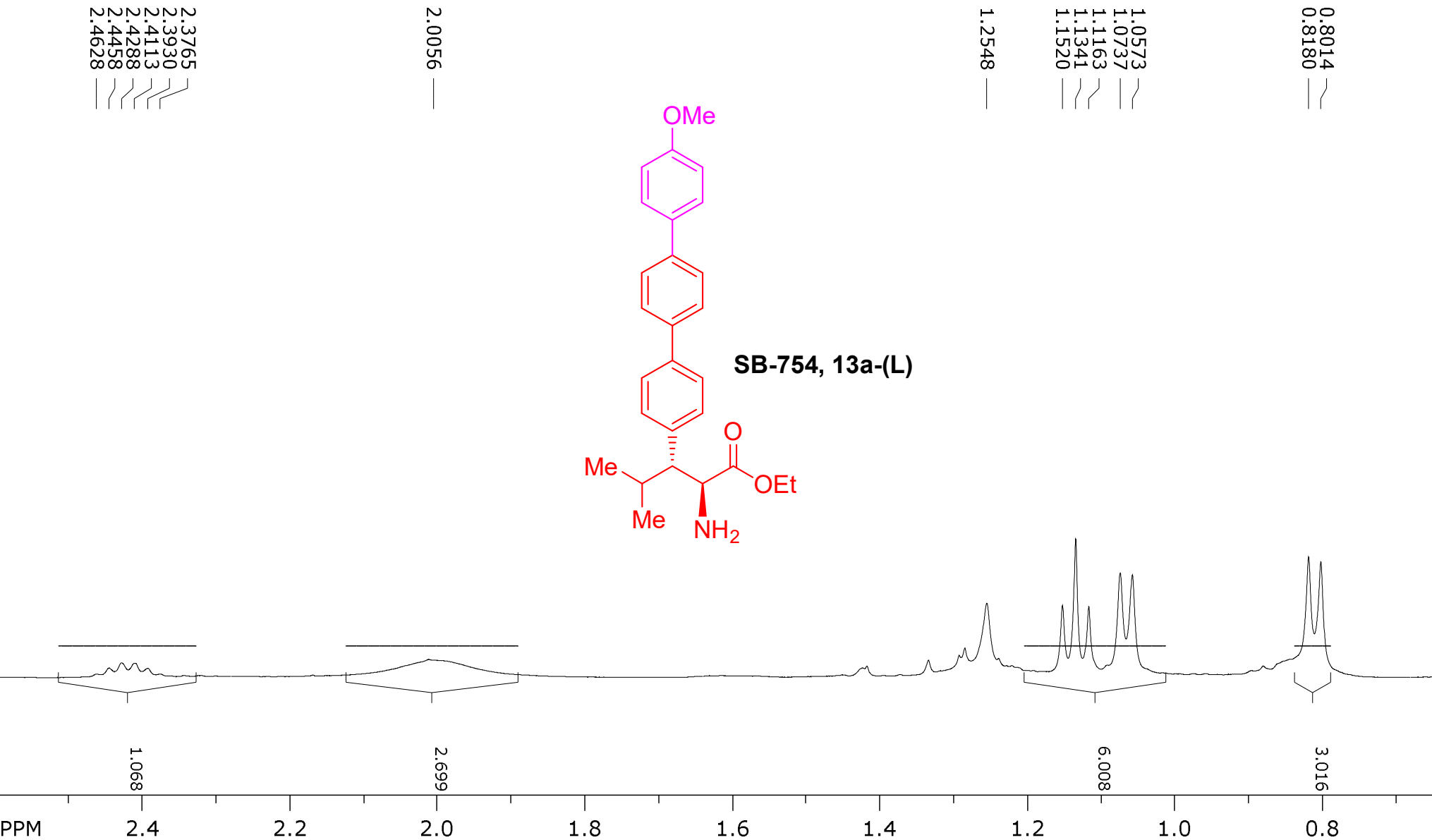


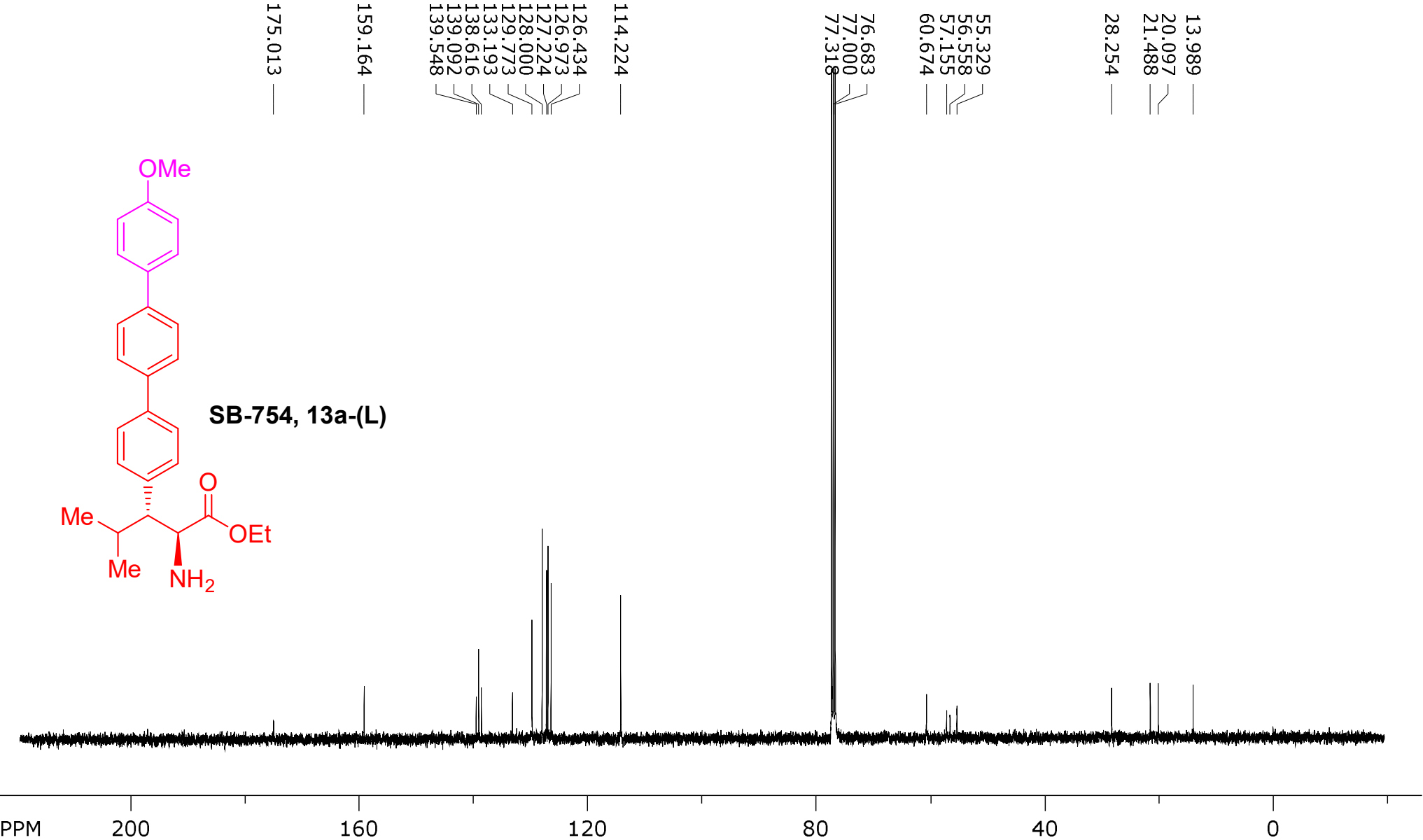


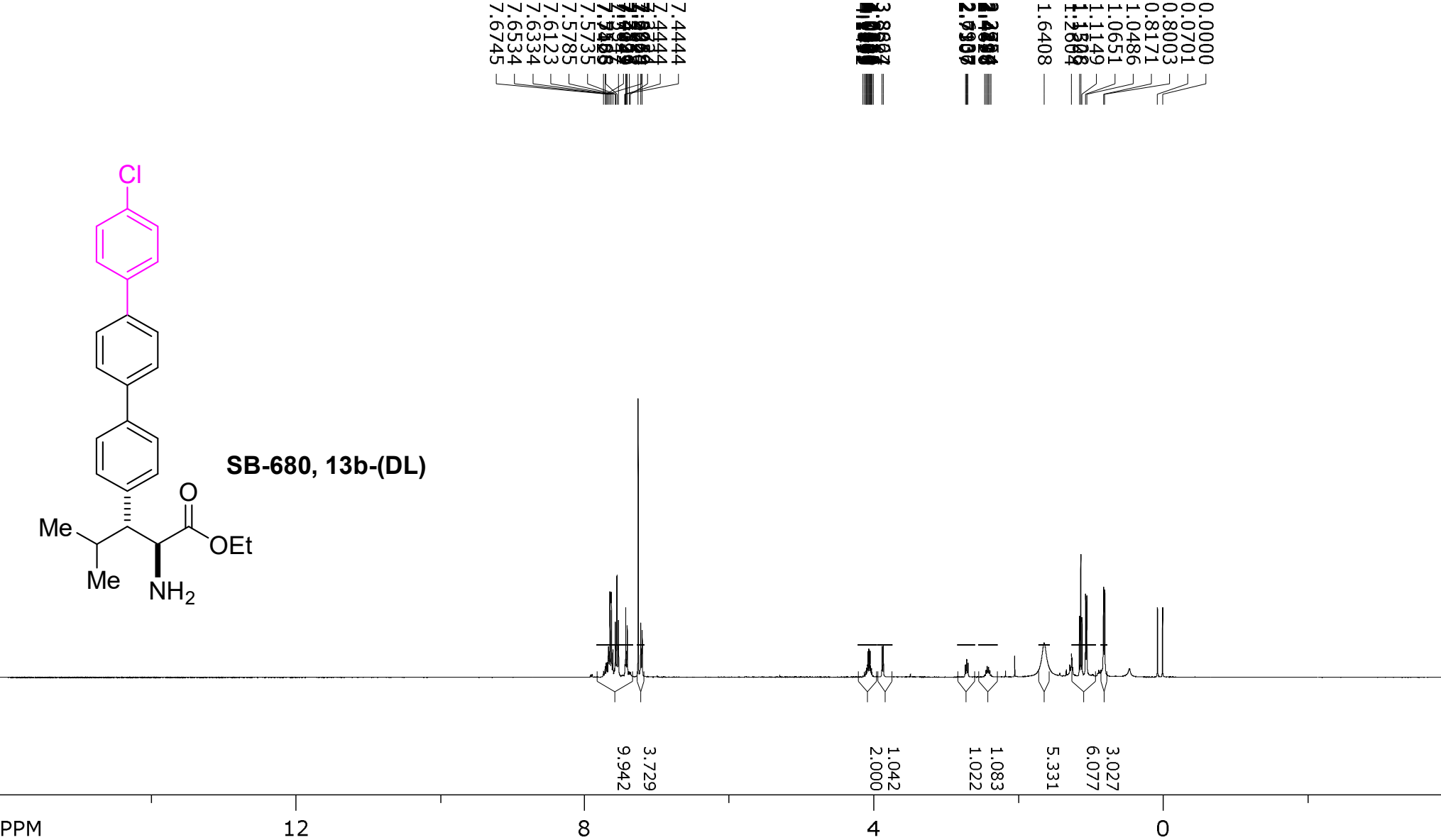


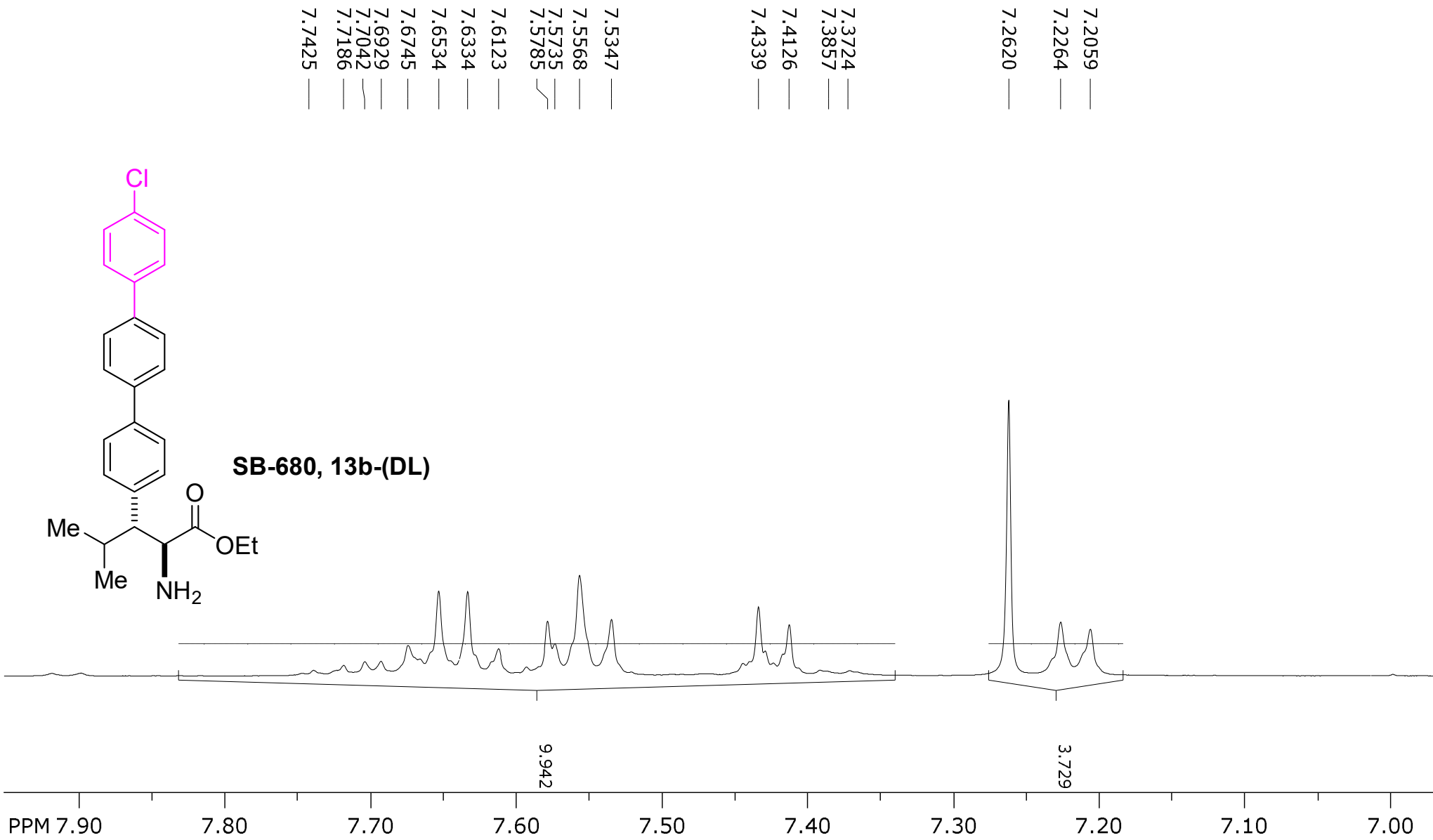








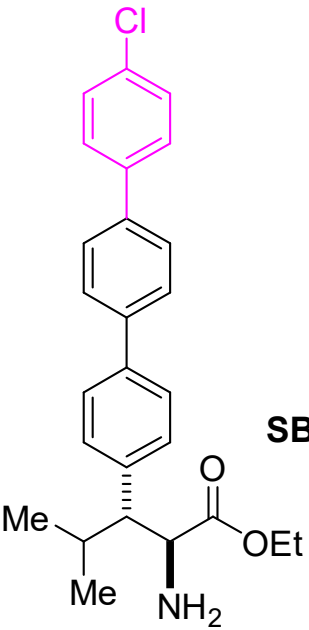




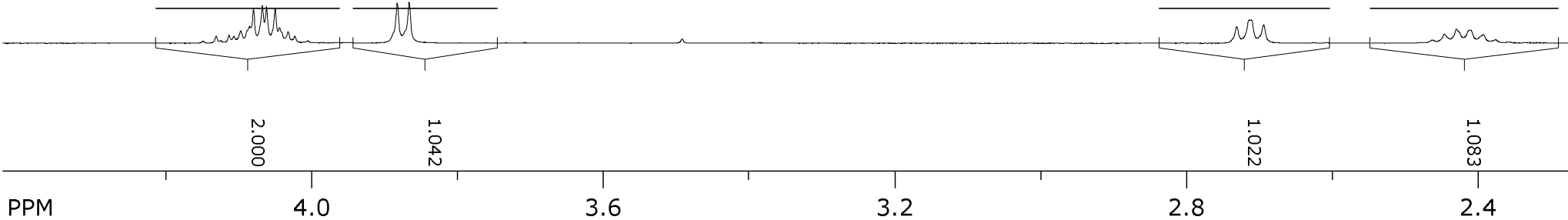
4.0232
4.0325
4.0502
4.0621
4.0680
4.0800
4.0855
4.1135
4.1313
4.1492
3.8664
3.8827

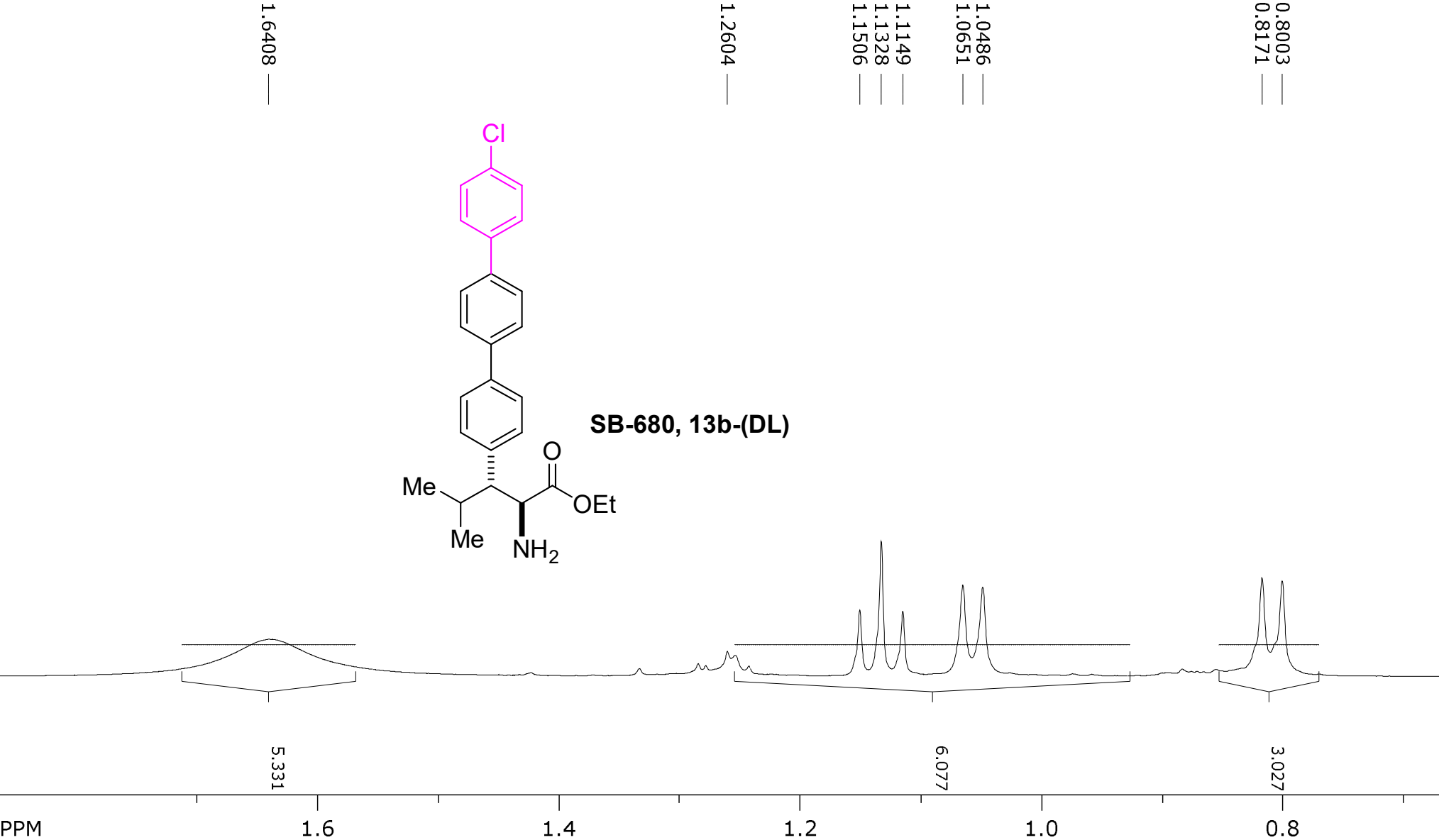
2.6937
2.7107
2.7136
2.7307

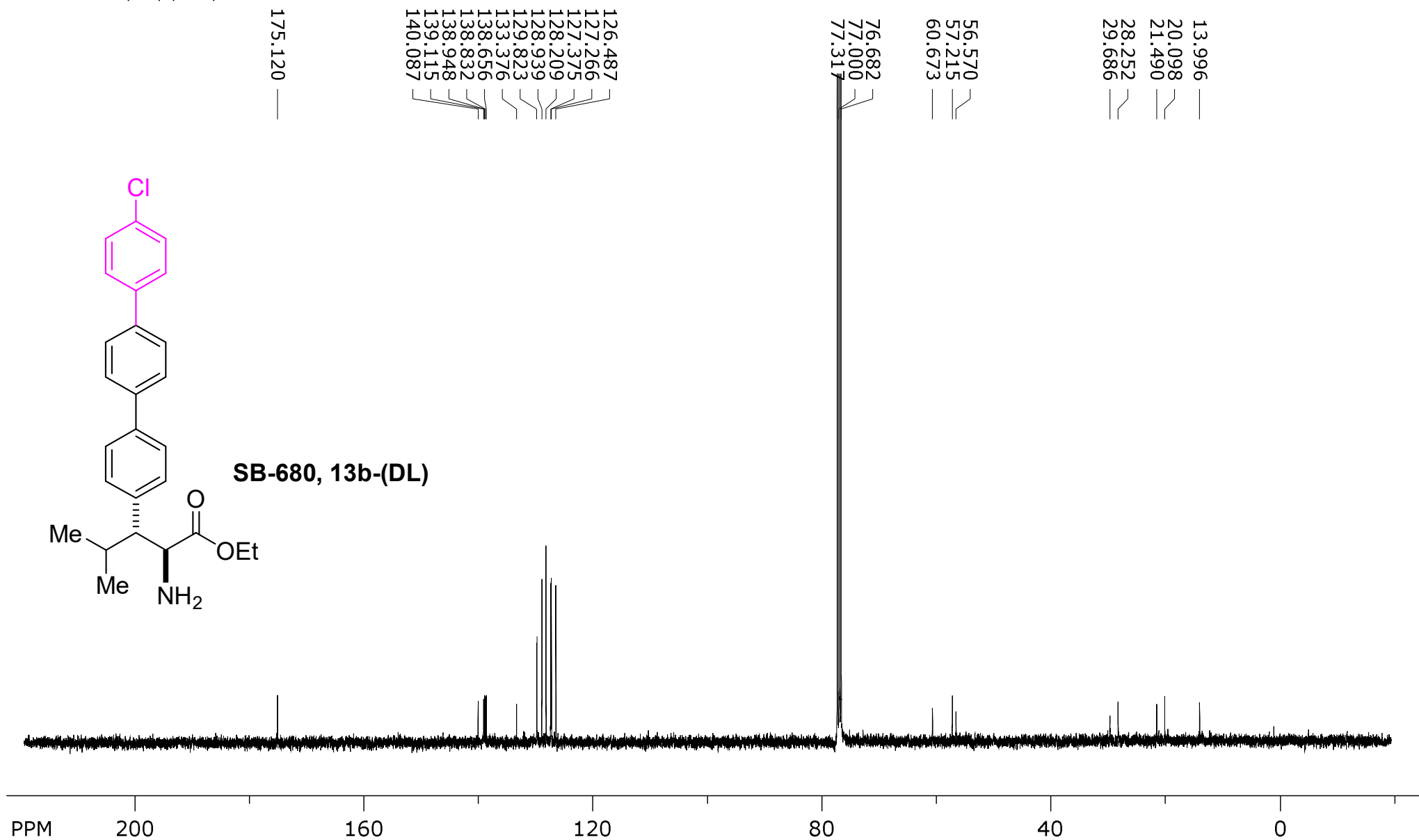
2.3754
2.3924
2.4117
2.4290
2.4458
2.4626

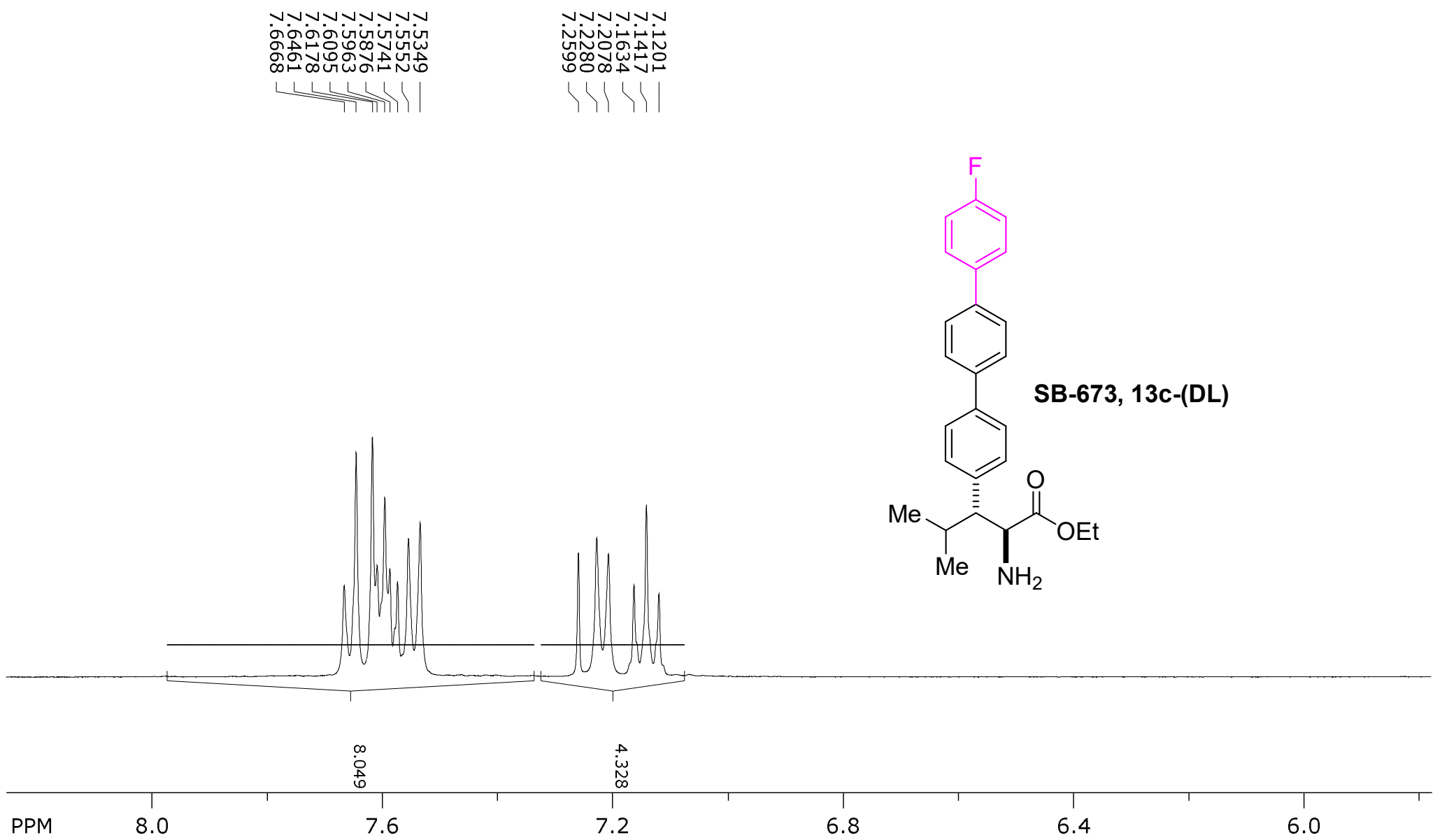


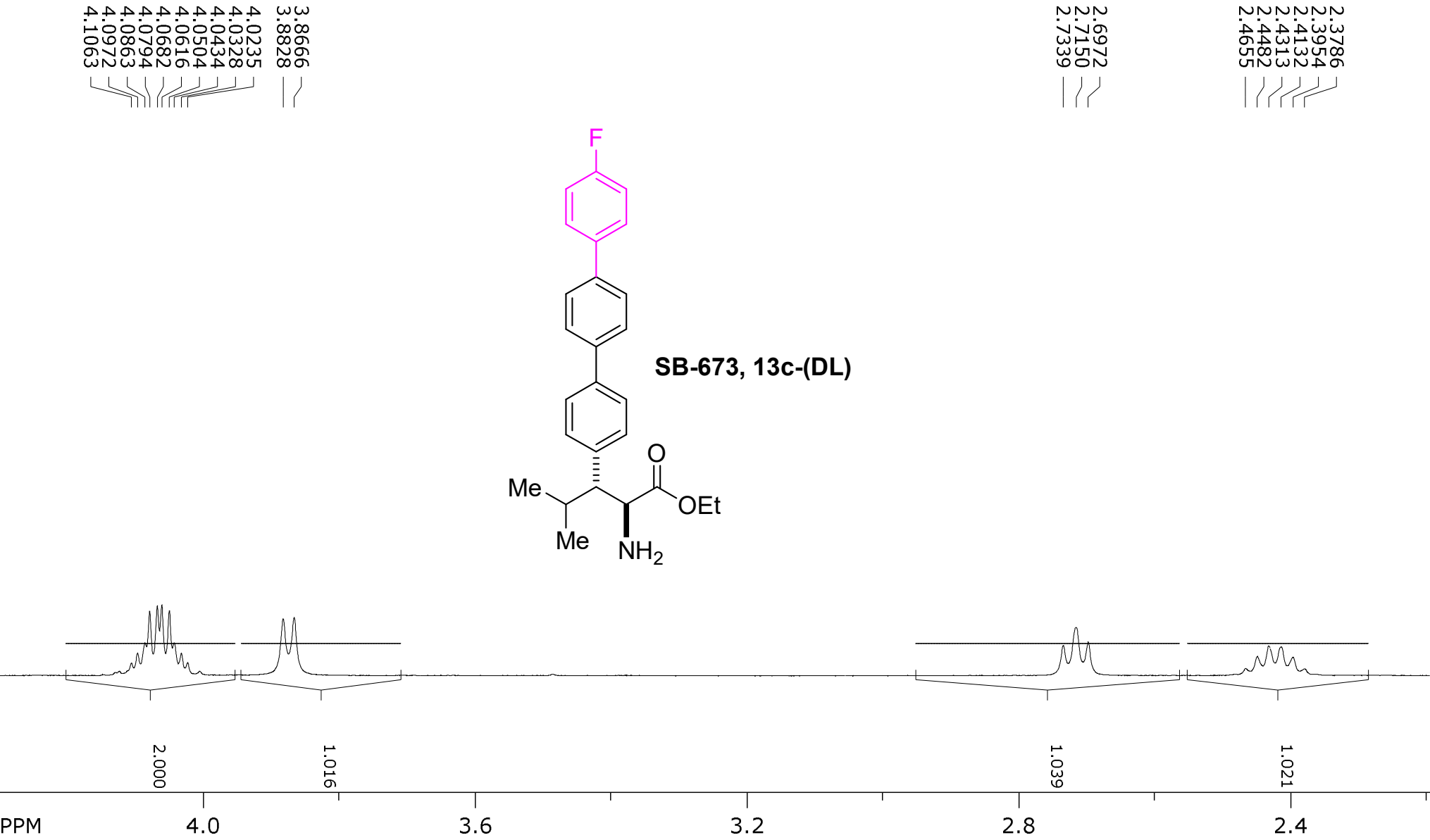
SB-680, 13b-(DL)

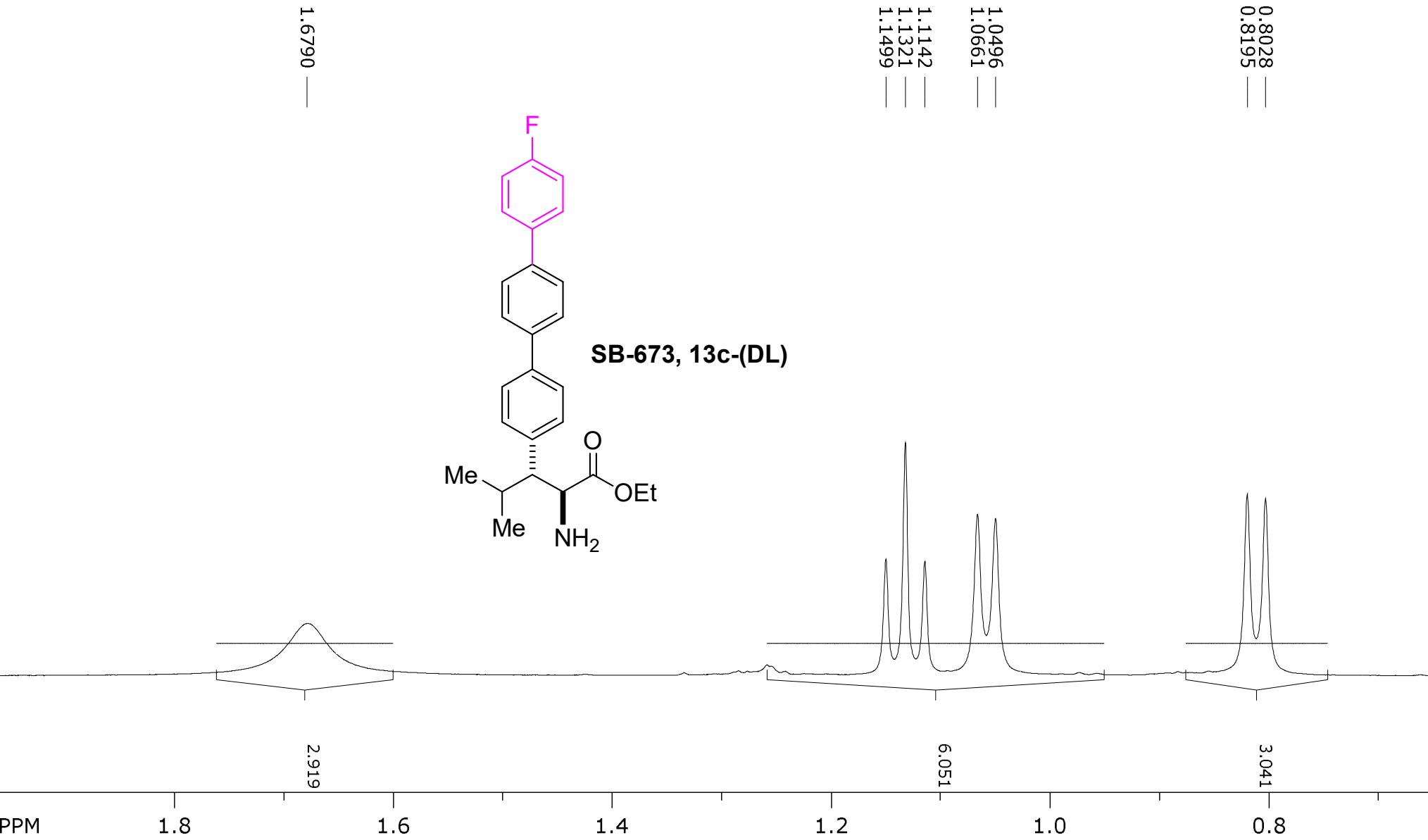


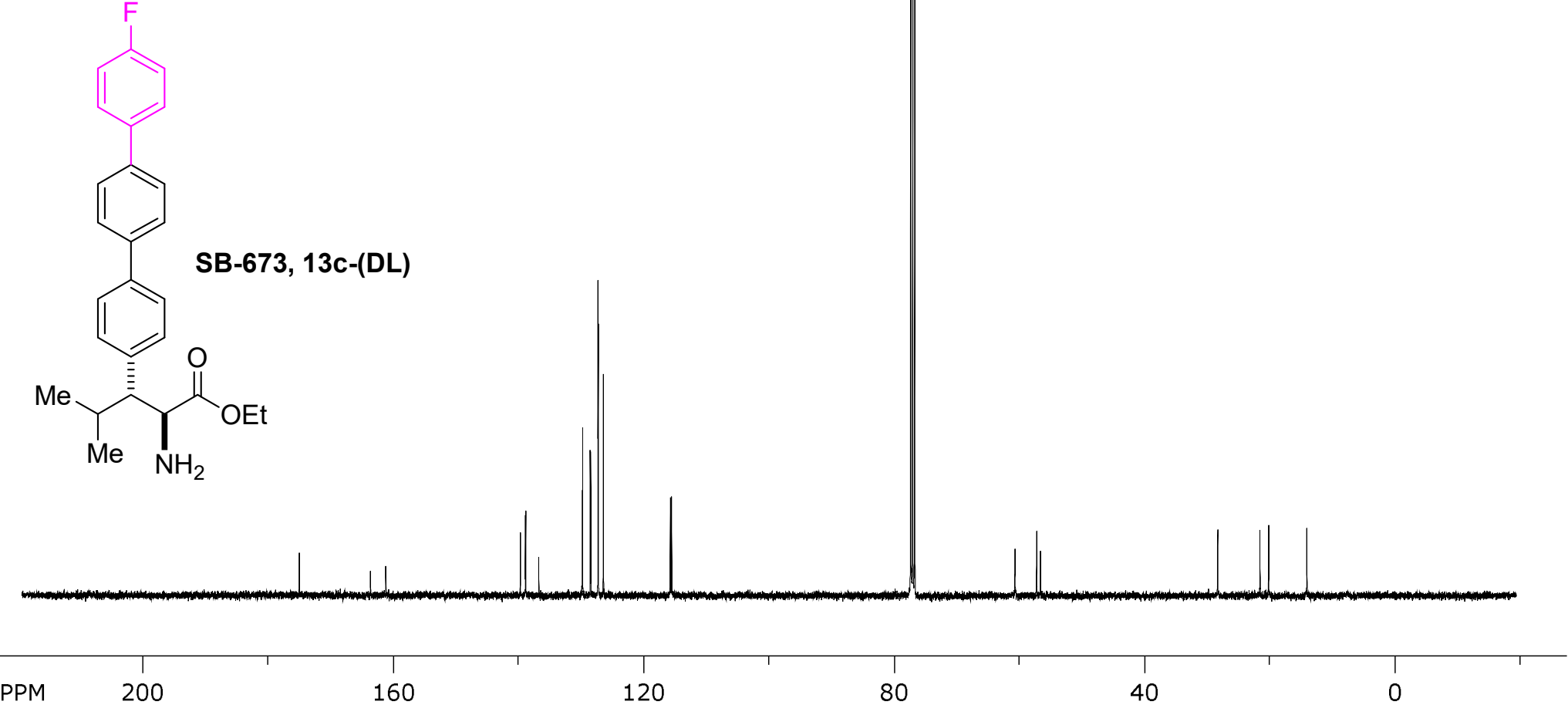


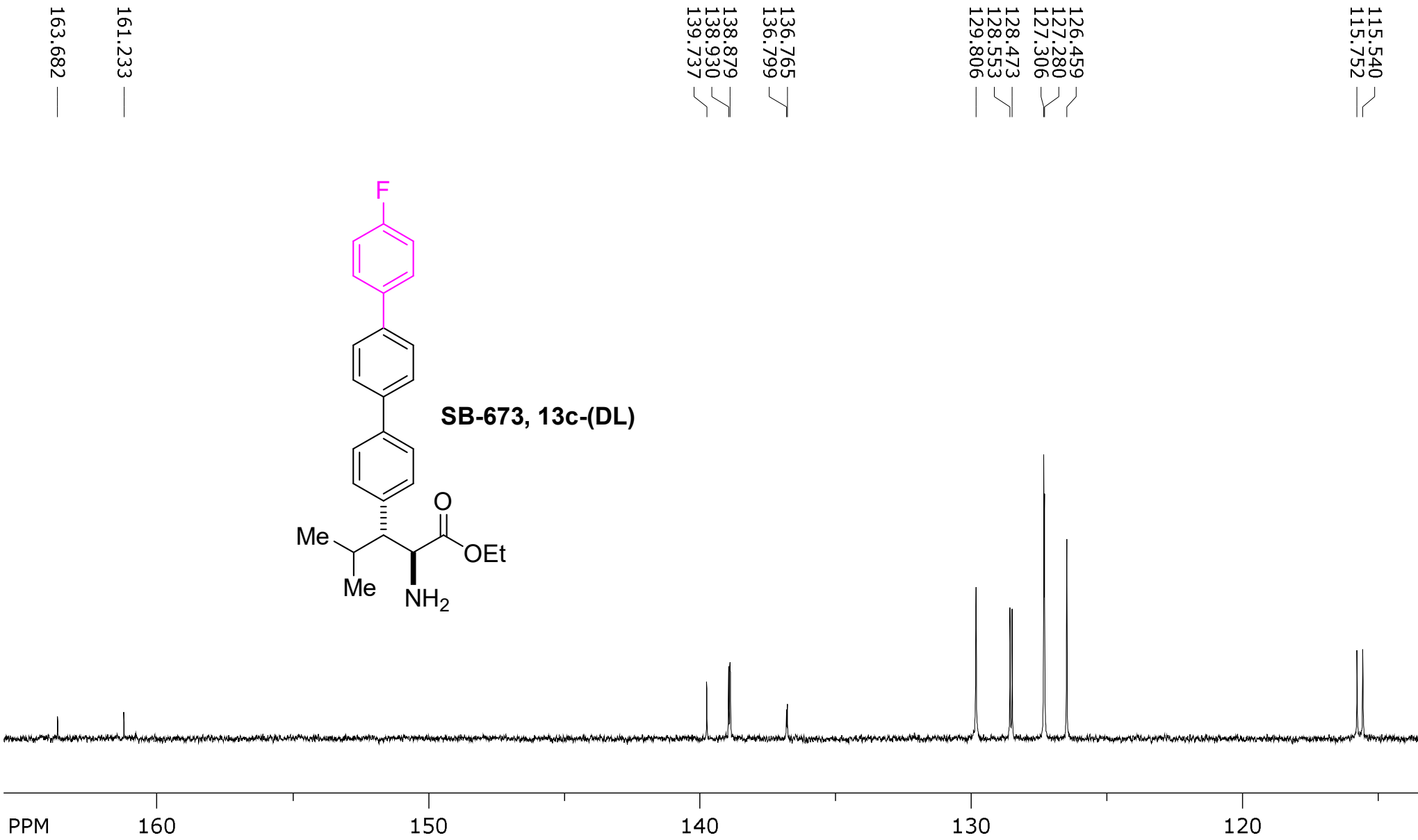


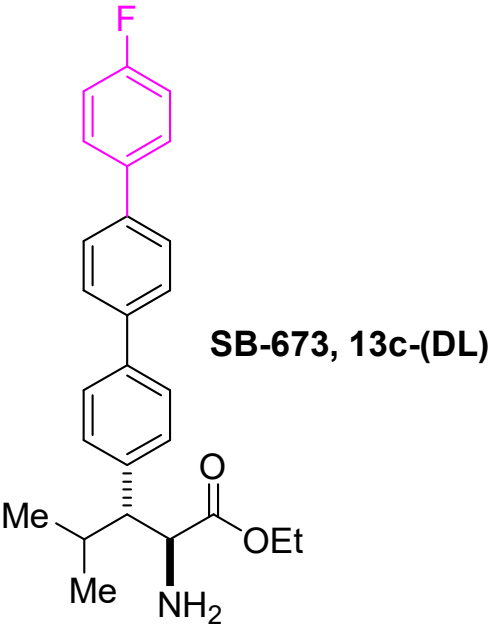




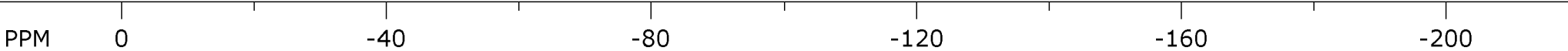


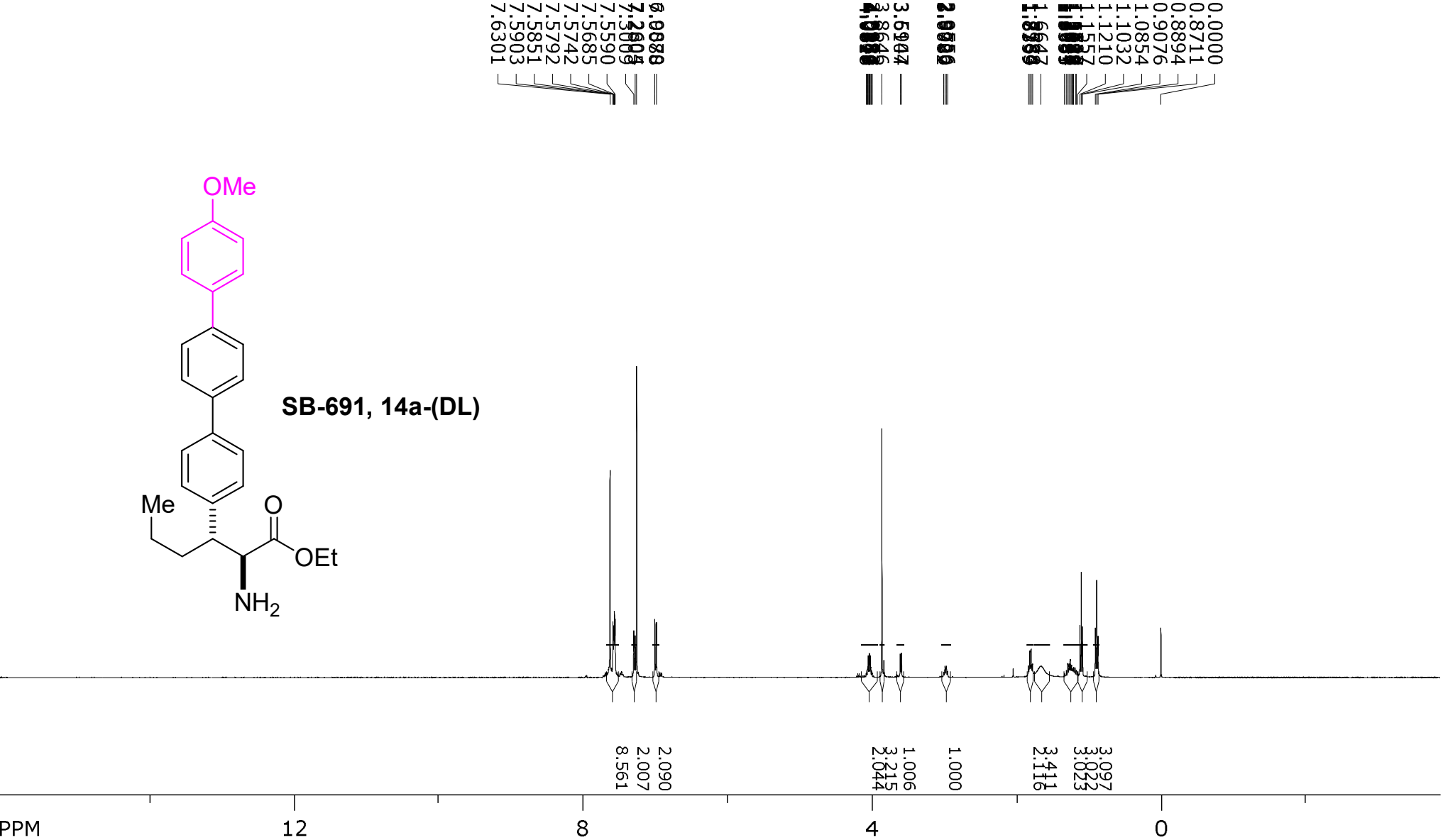


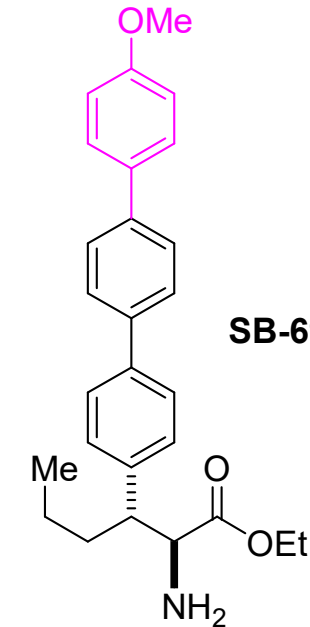




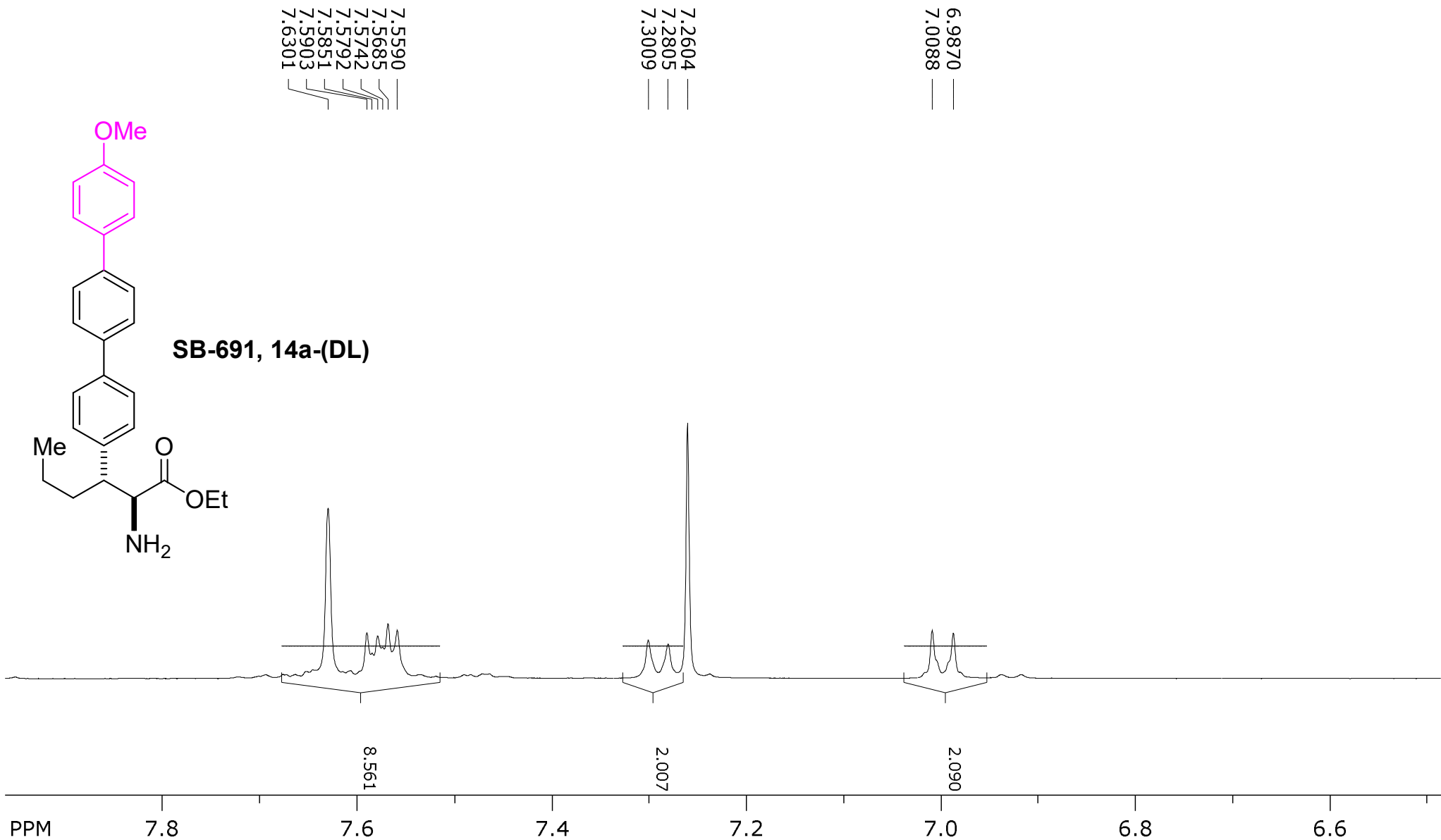
-115.6368

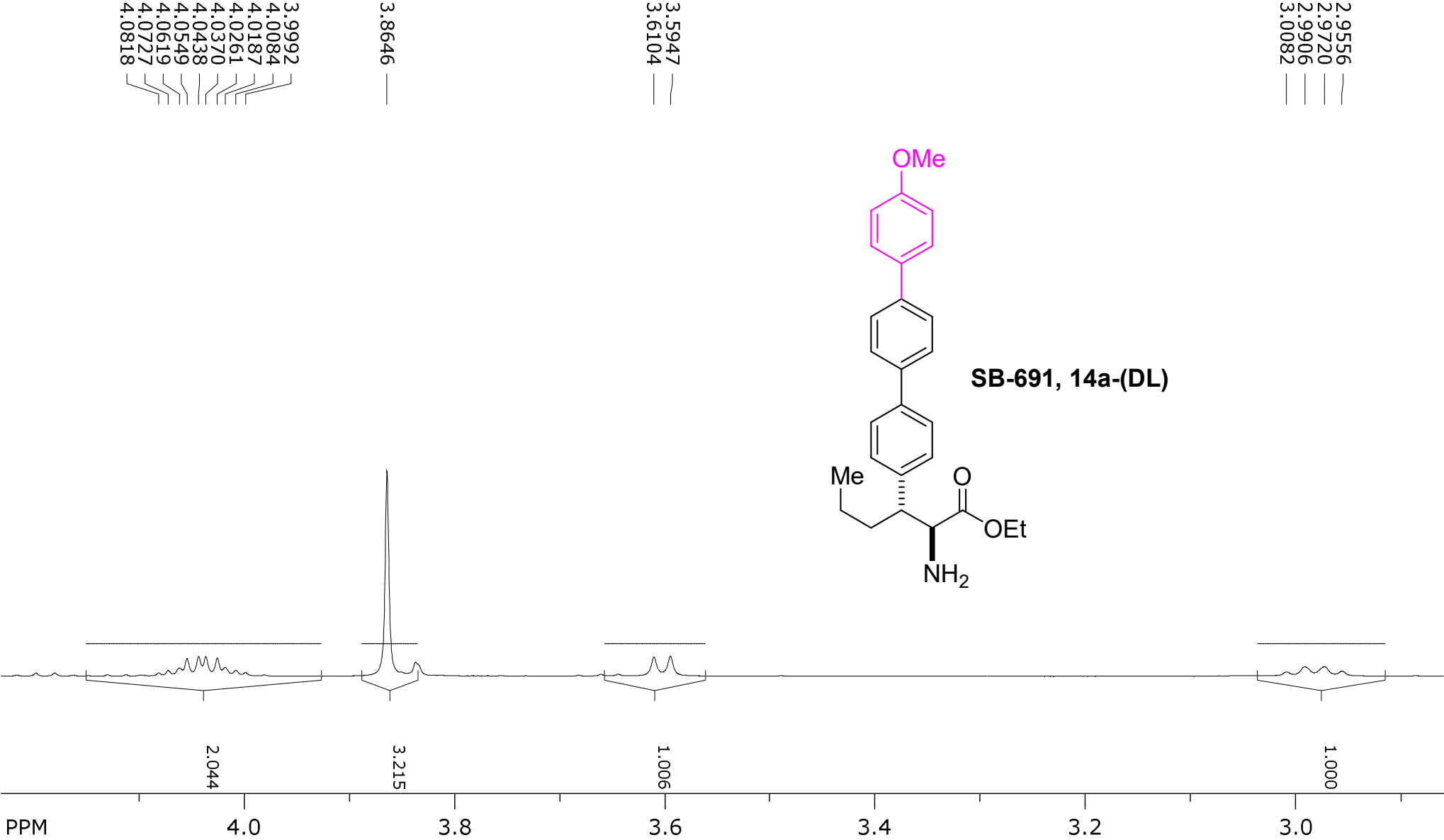


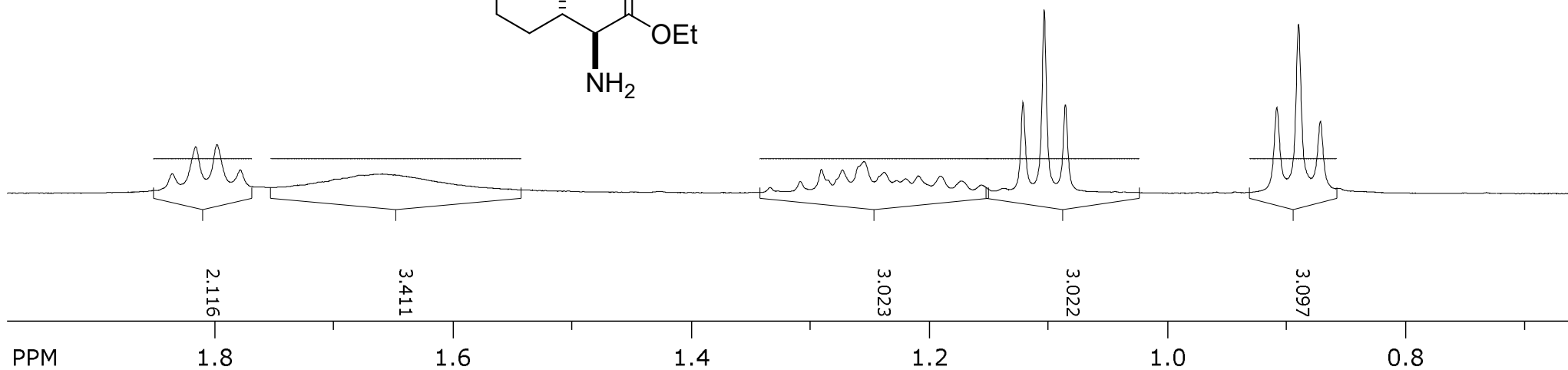


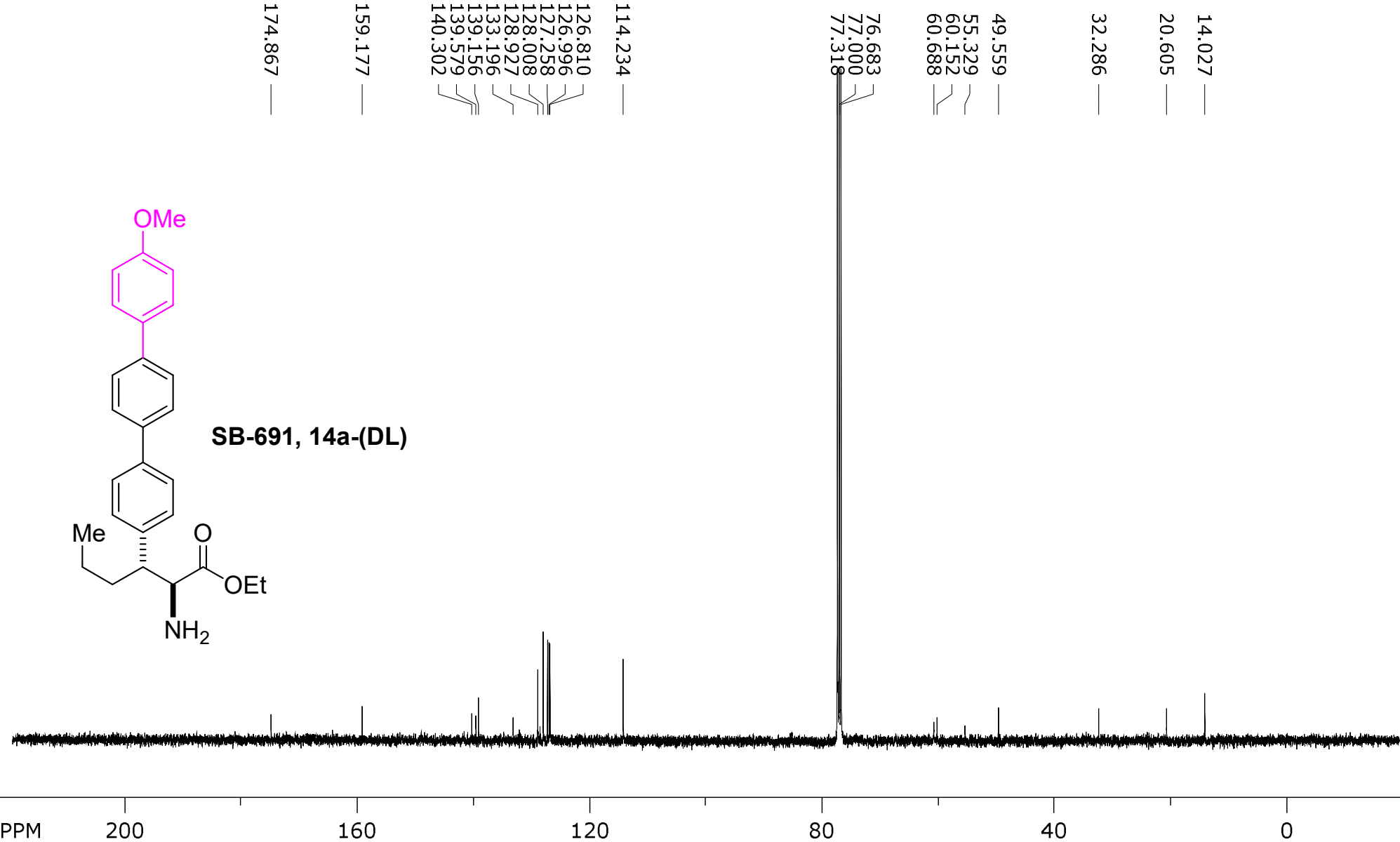


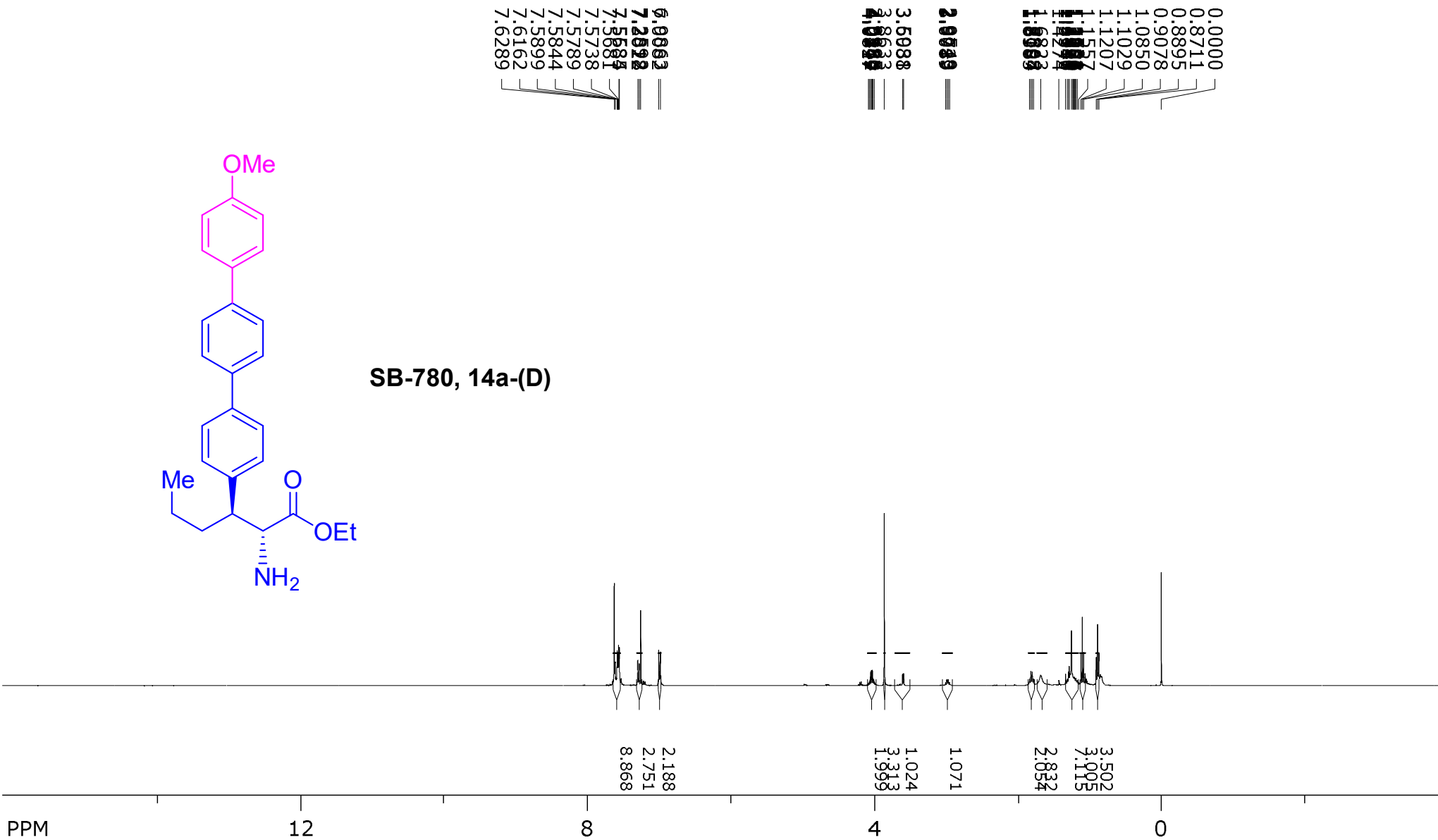
SB-691, 14a-(DL)

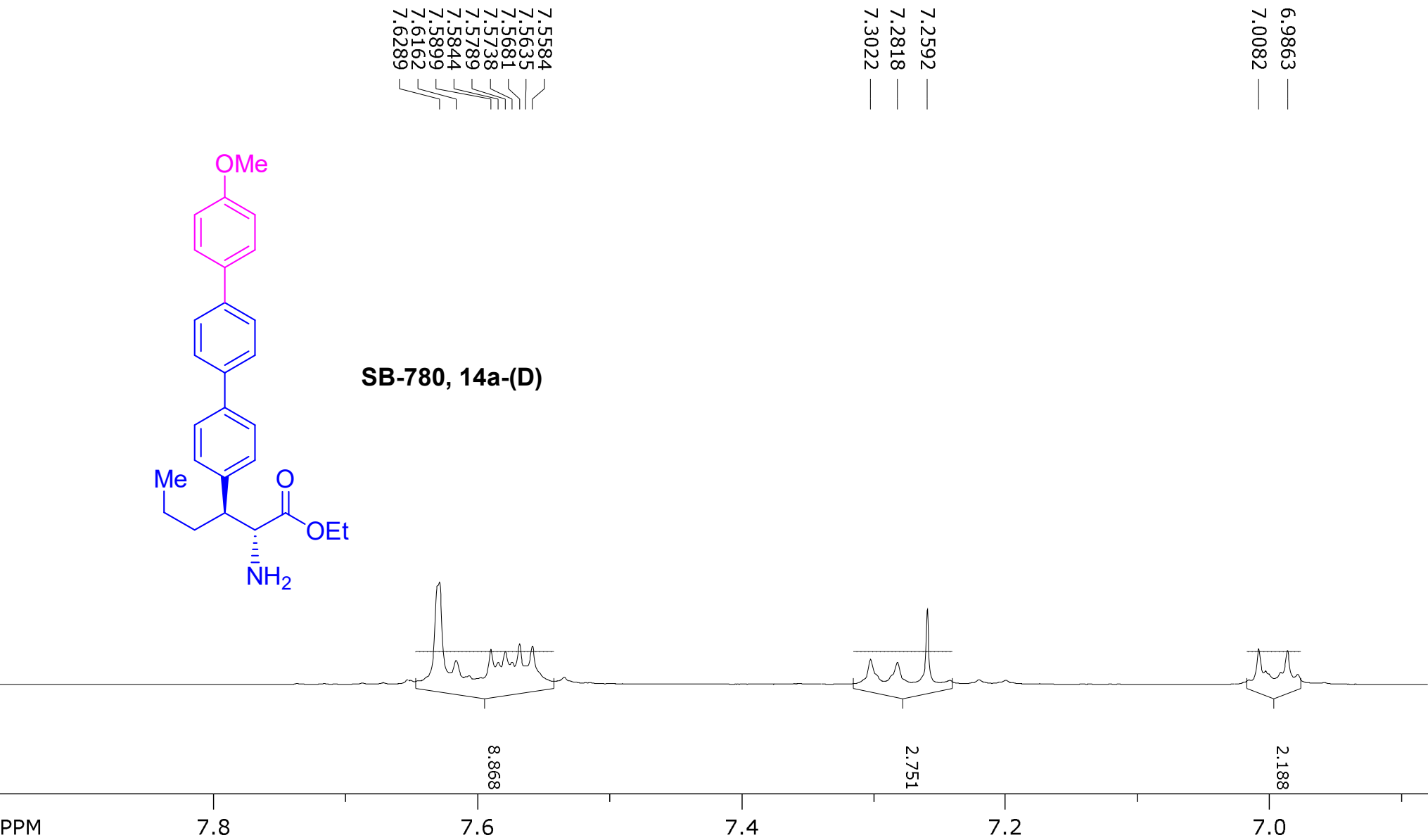


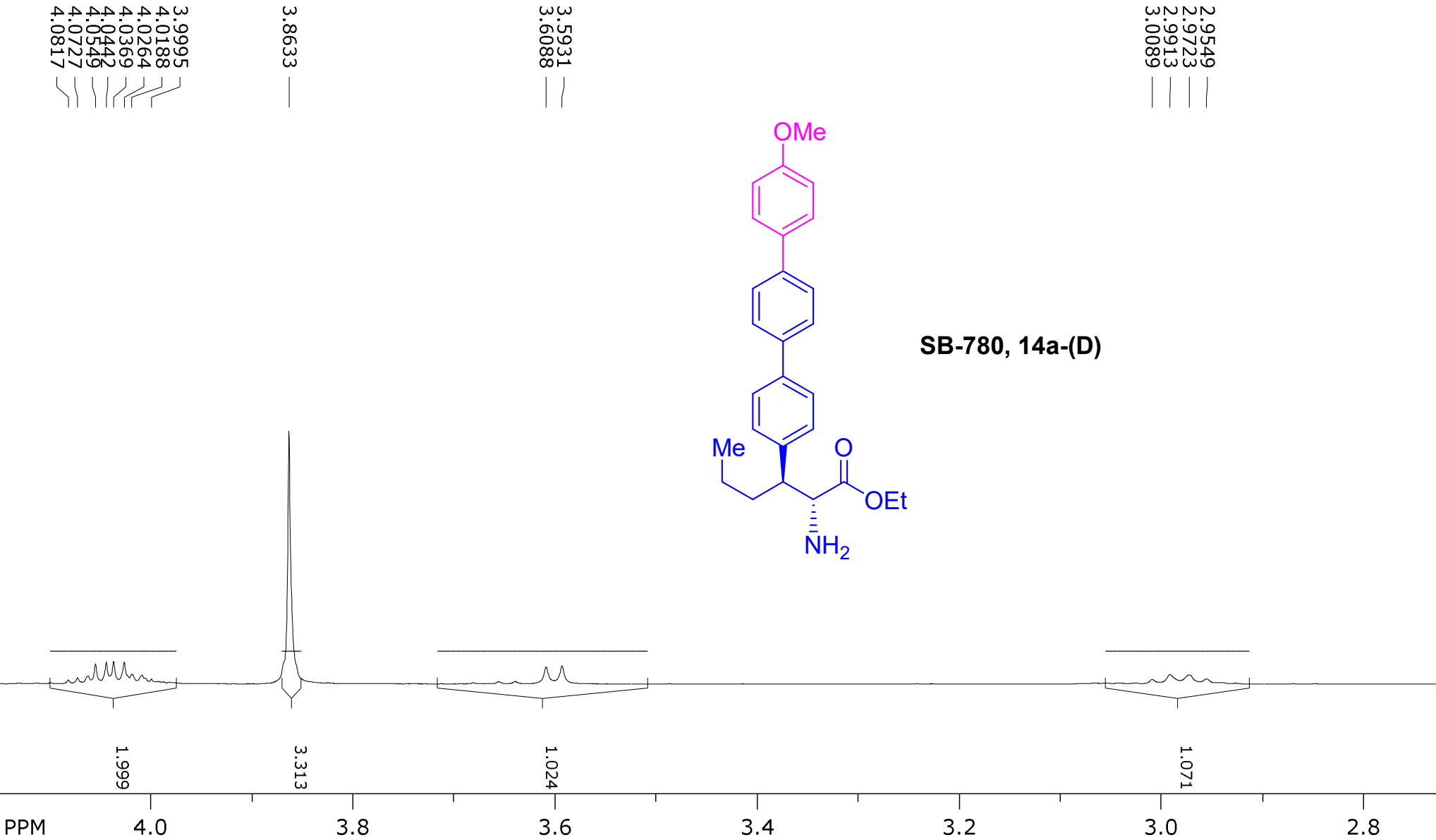


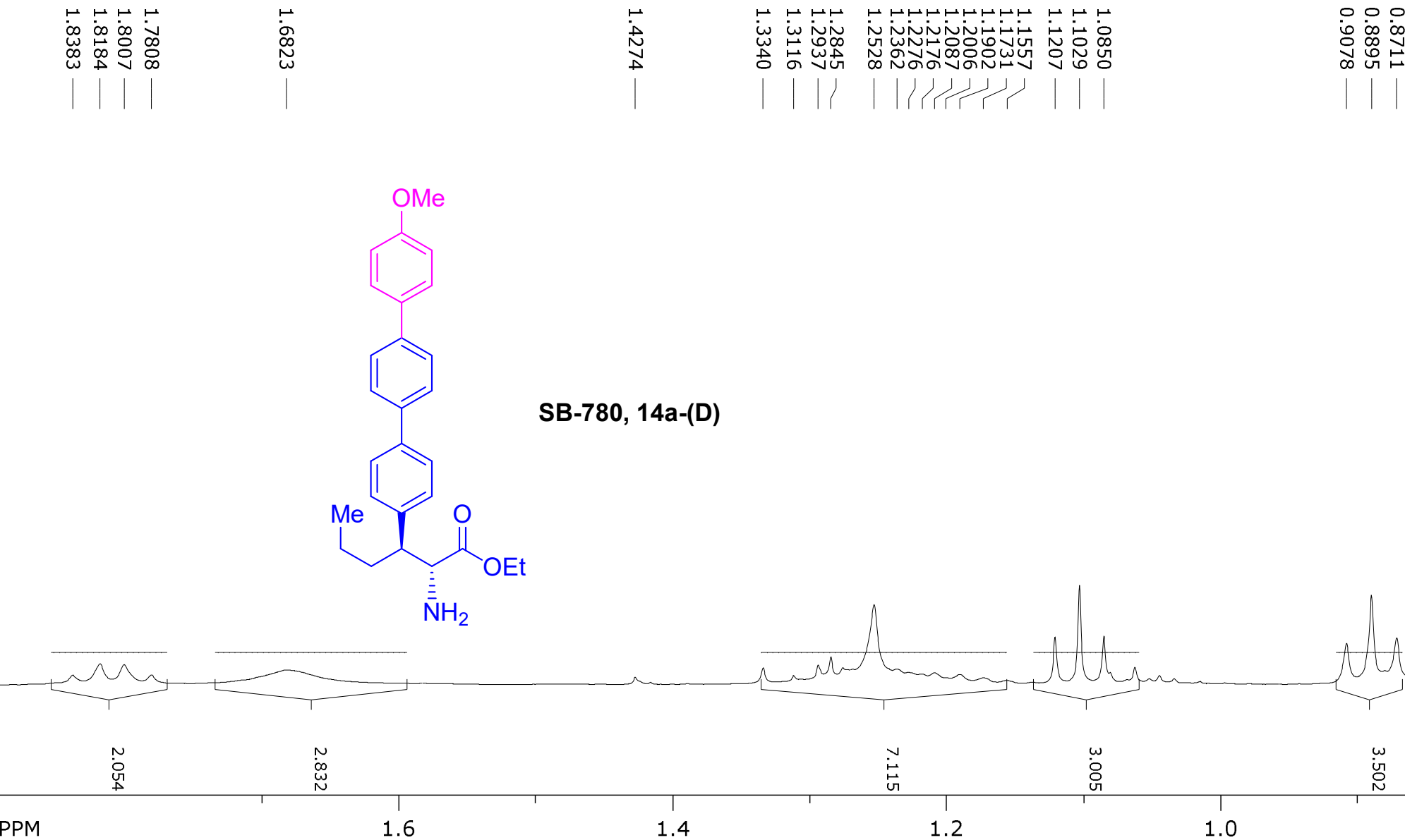


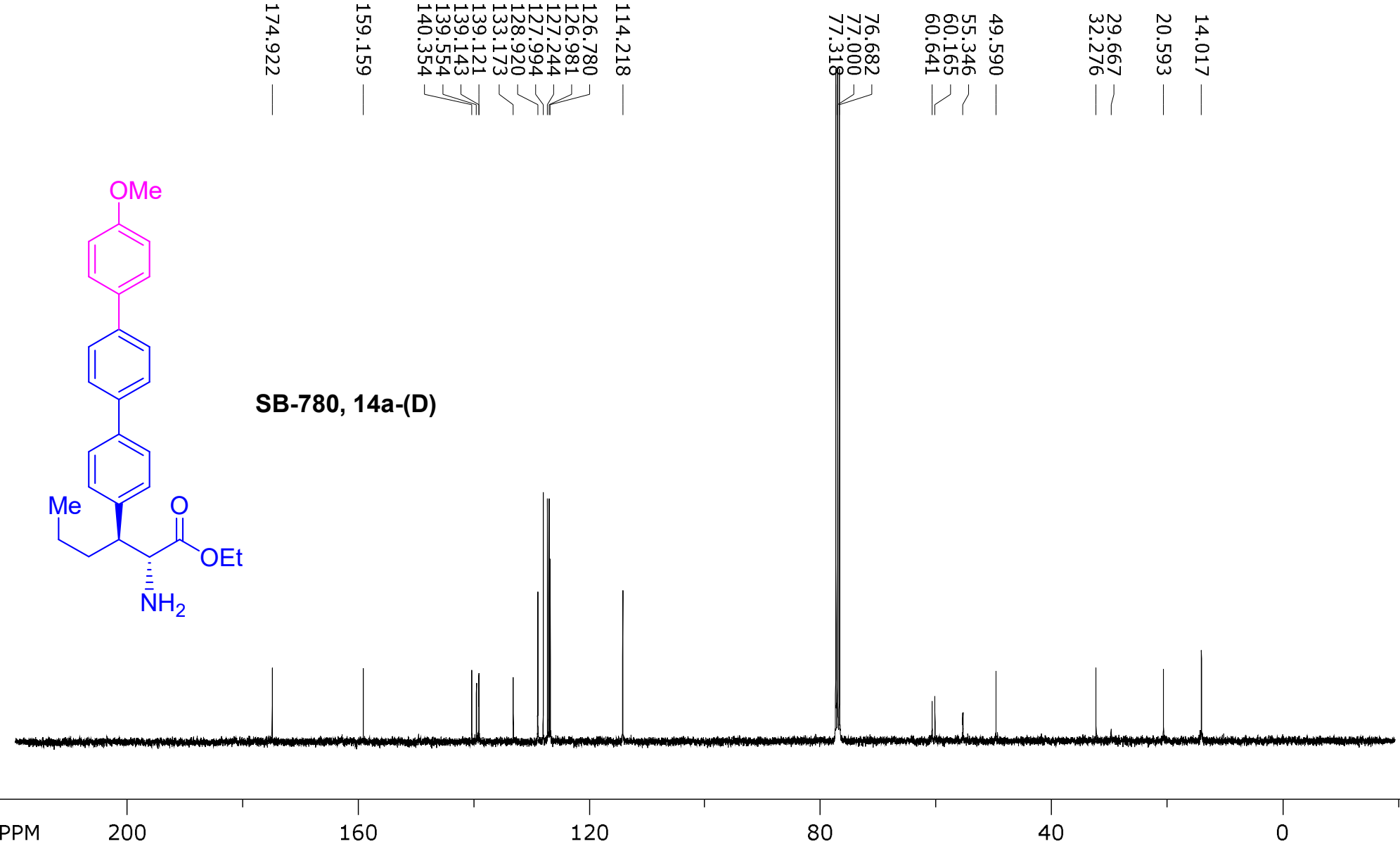


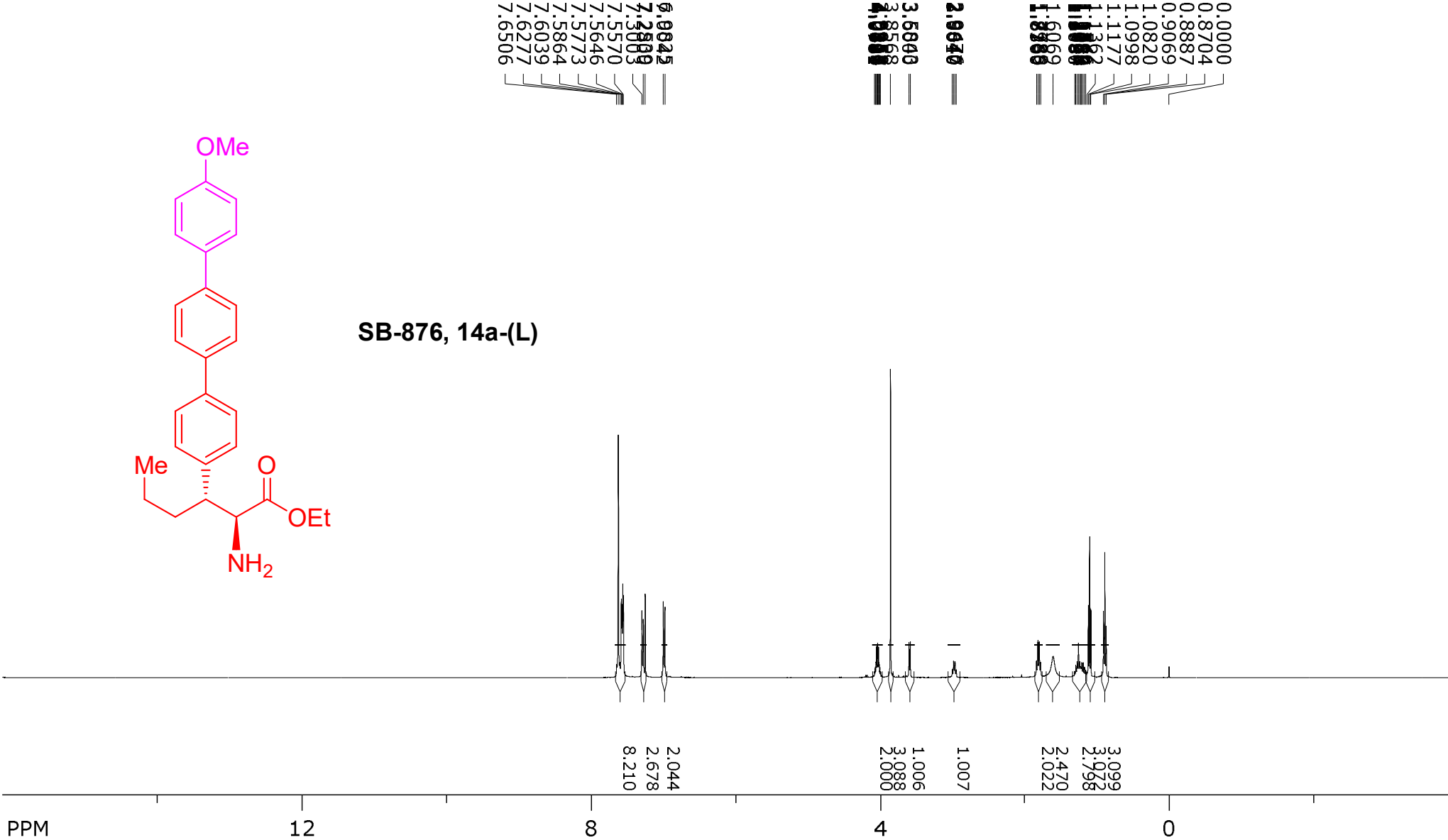


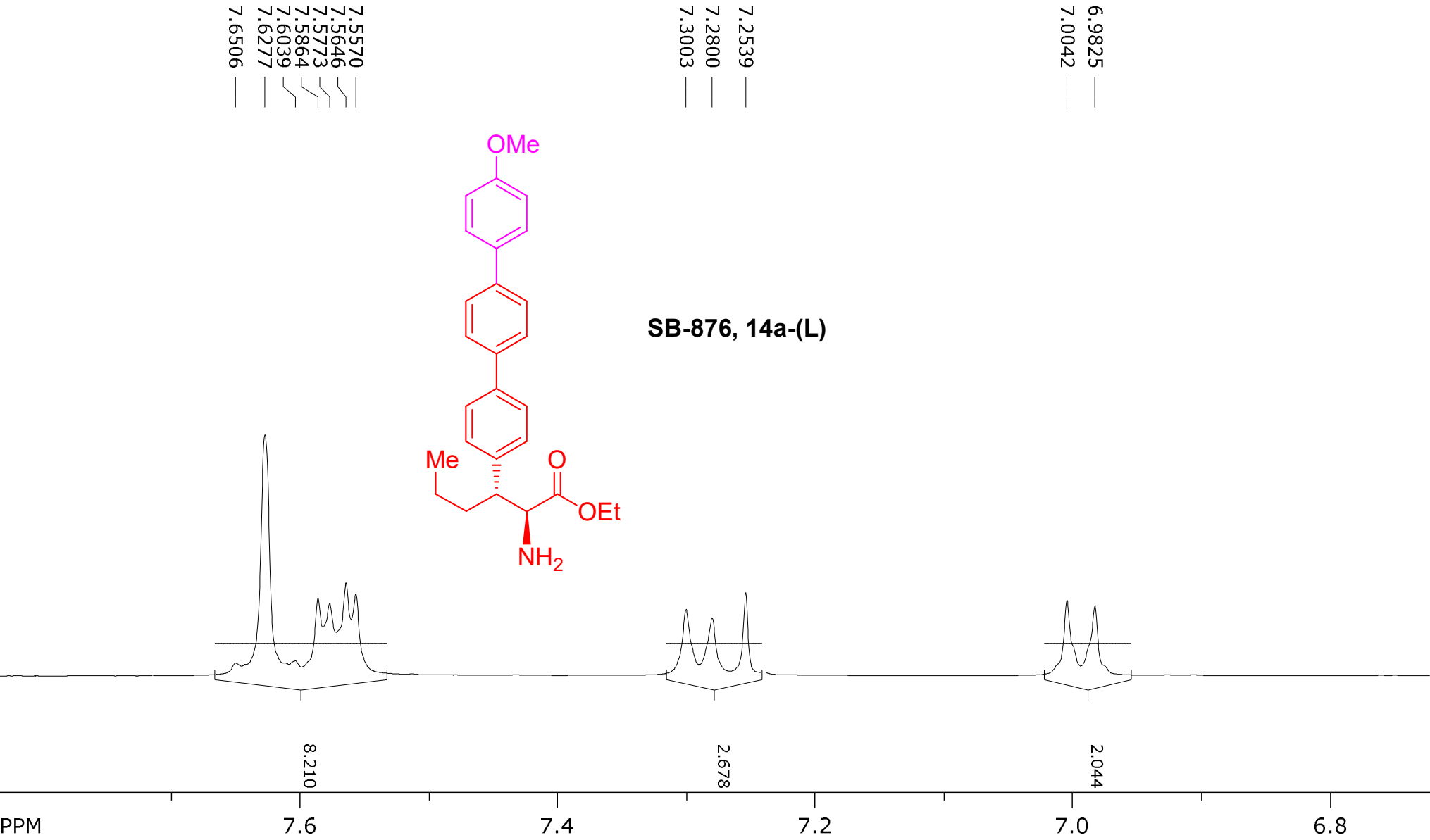


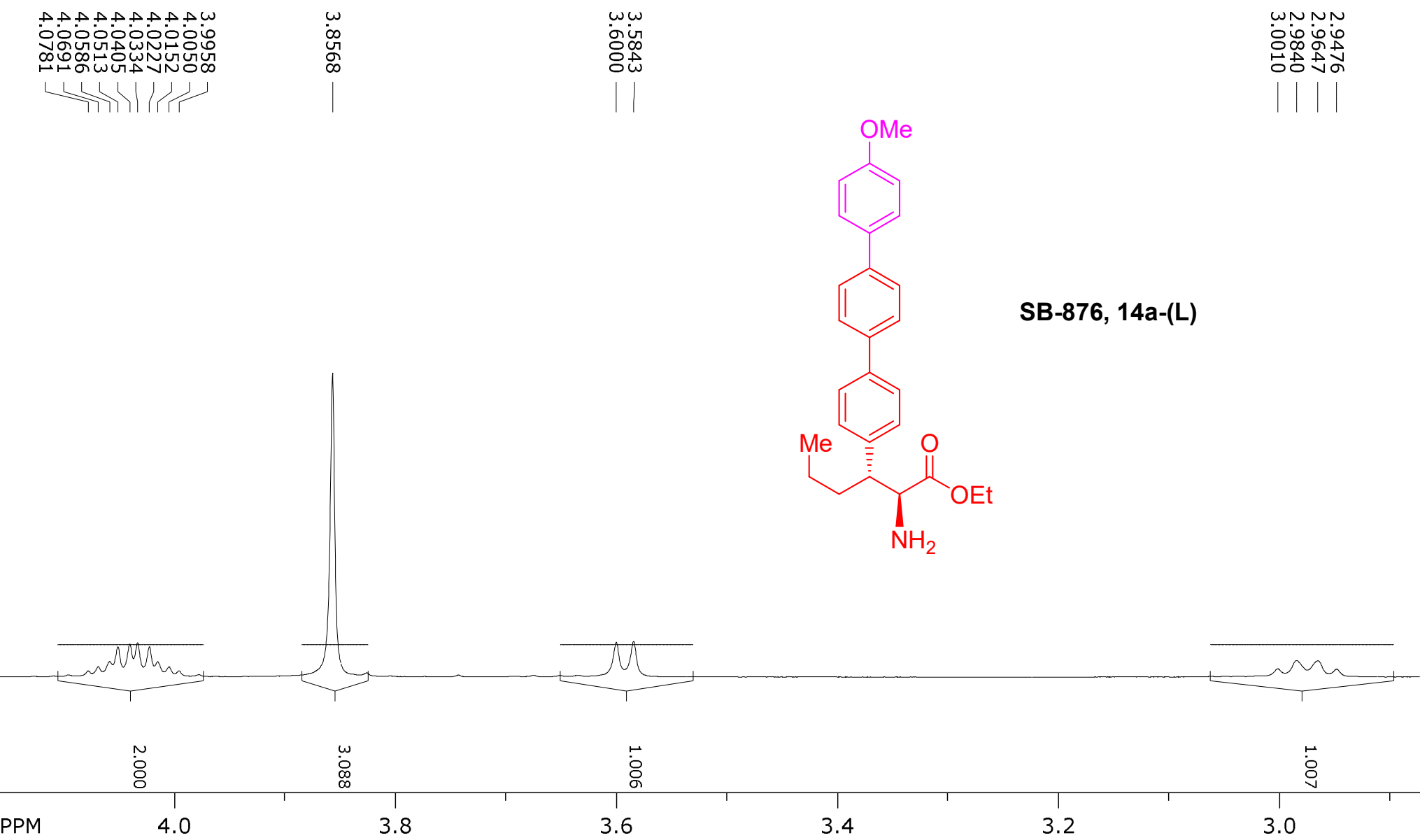


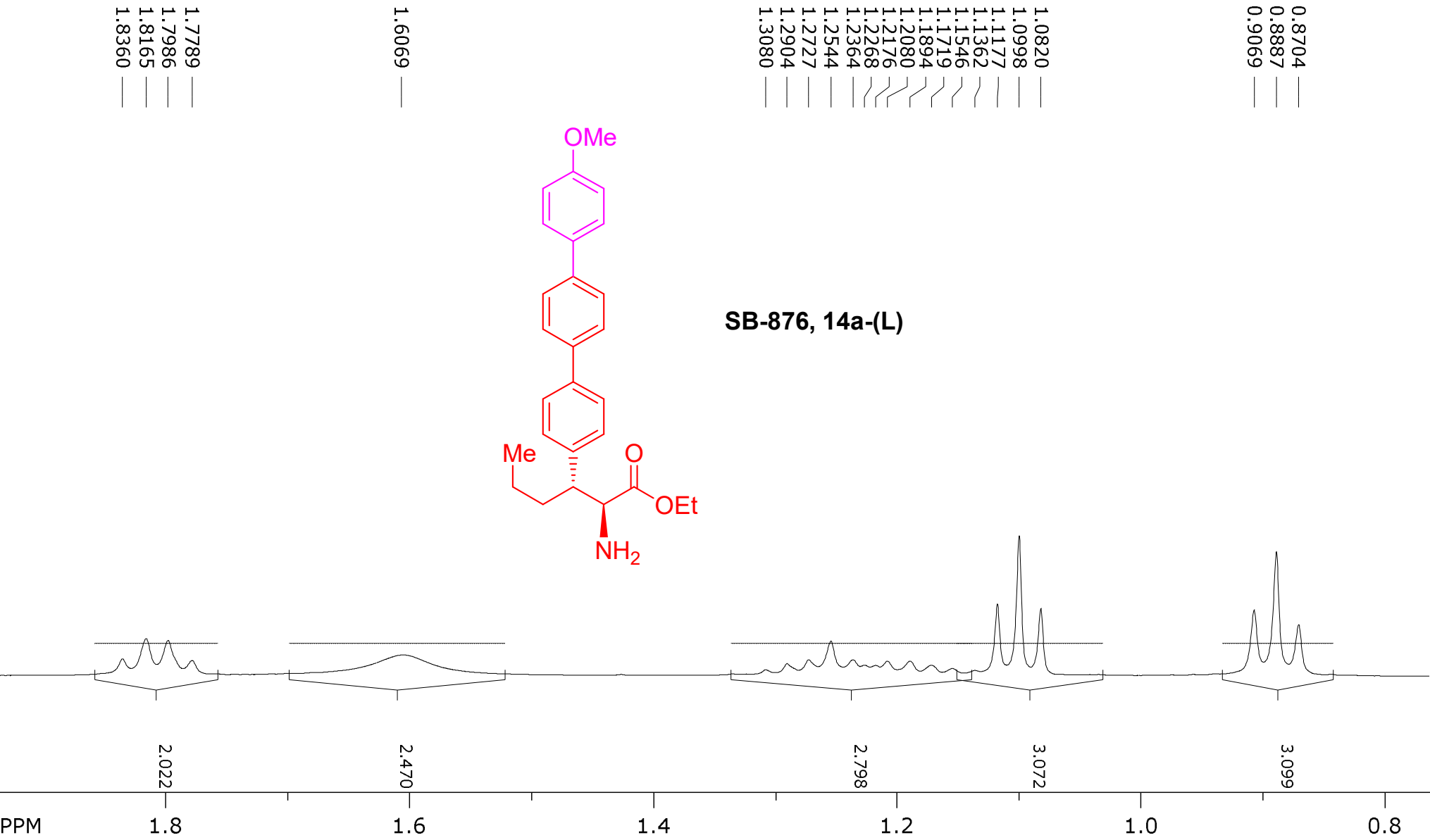


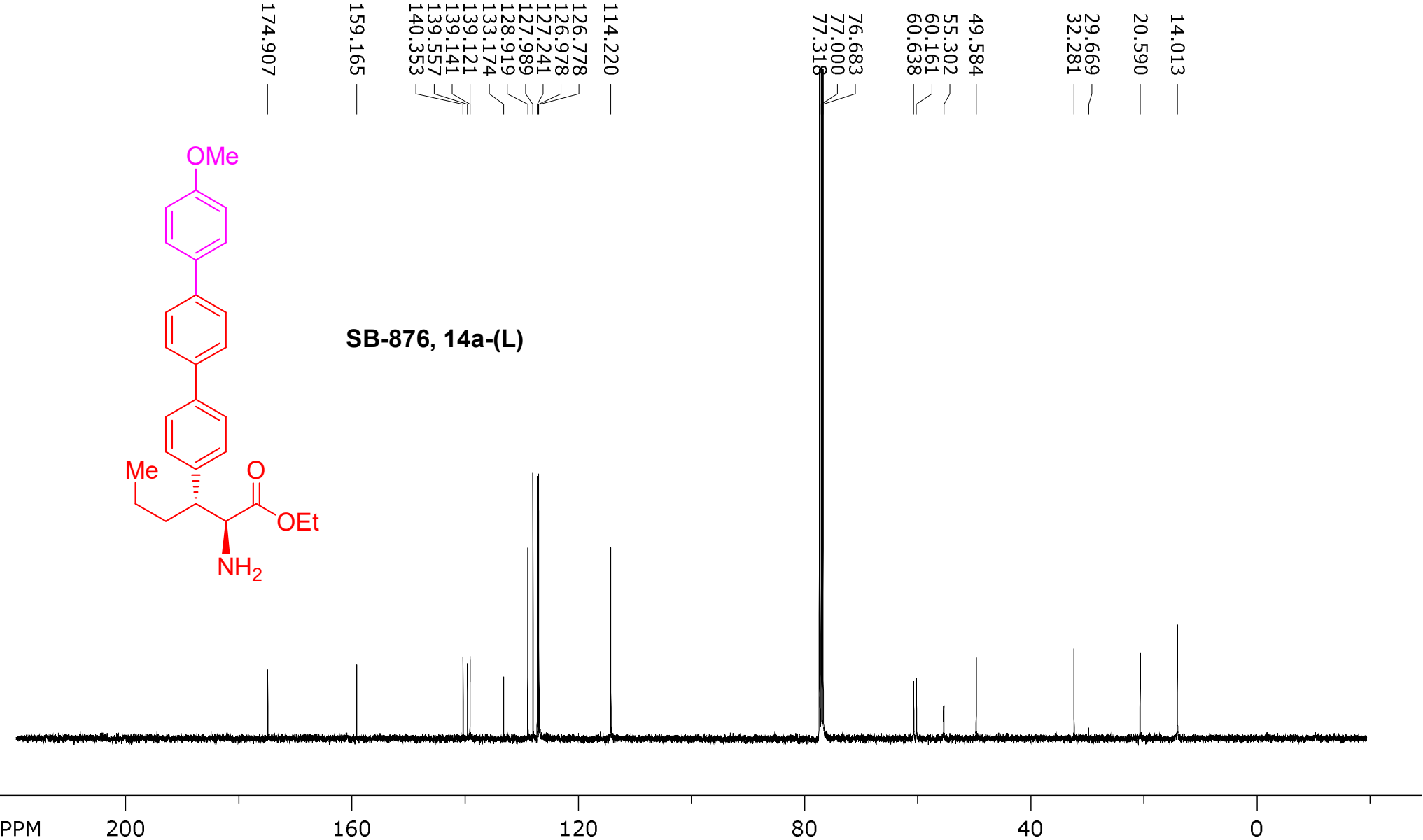


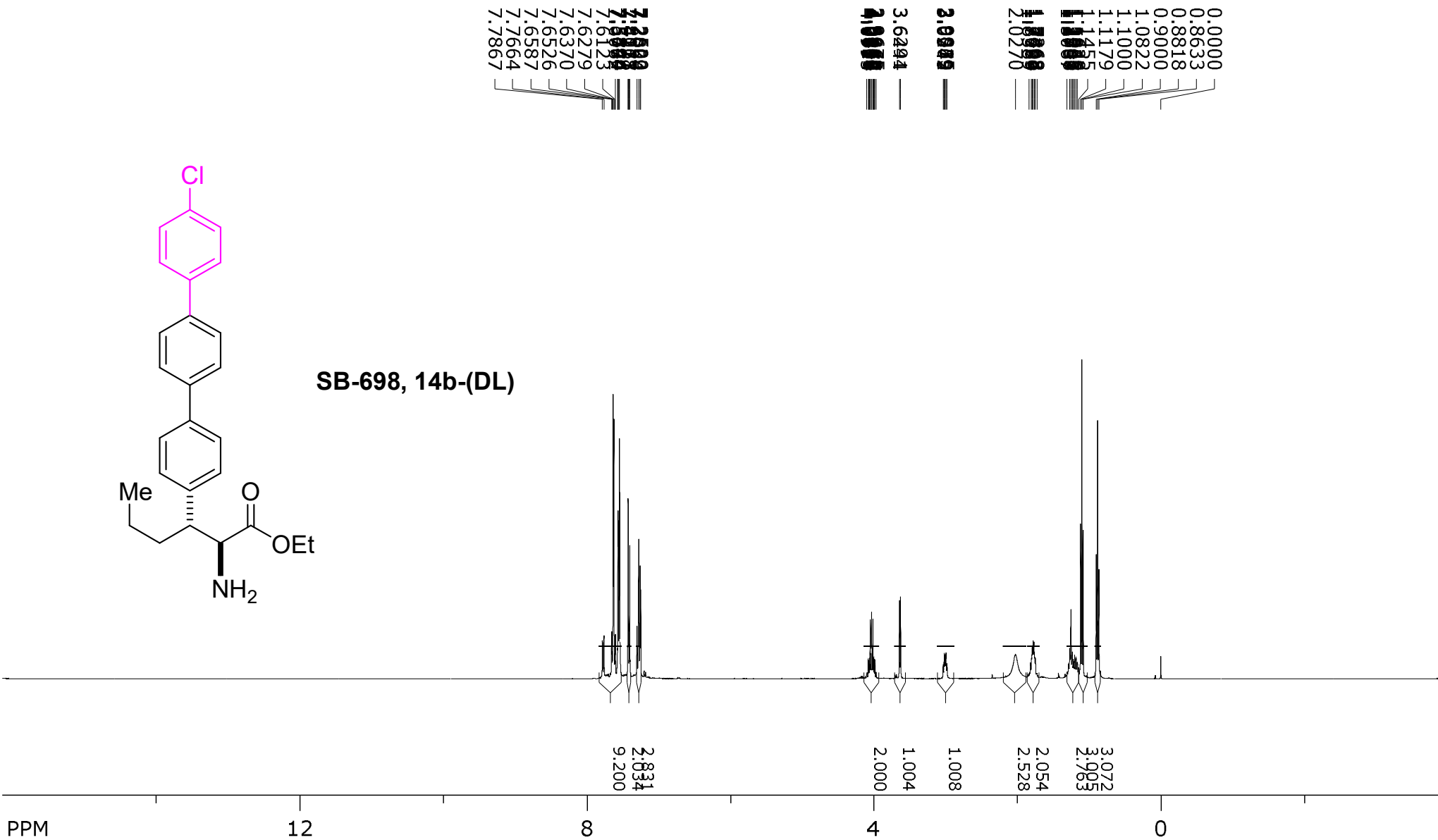


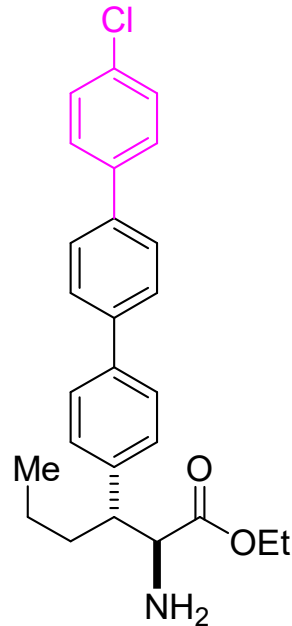




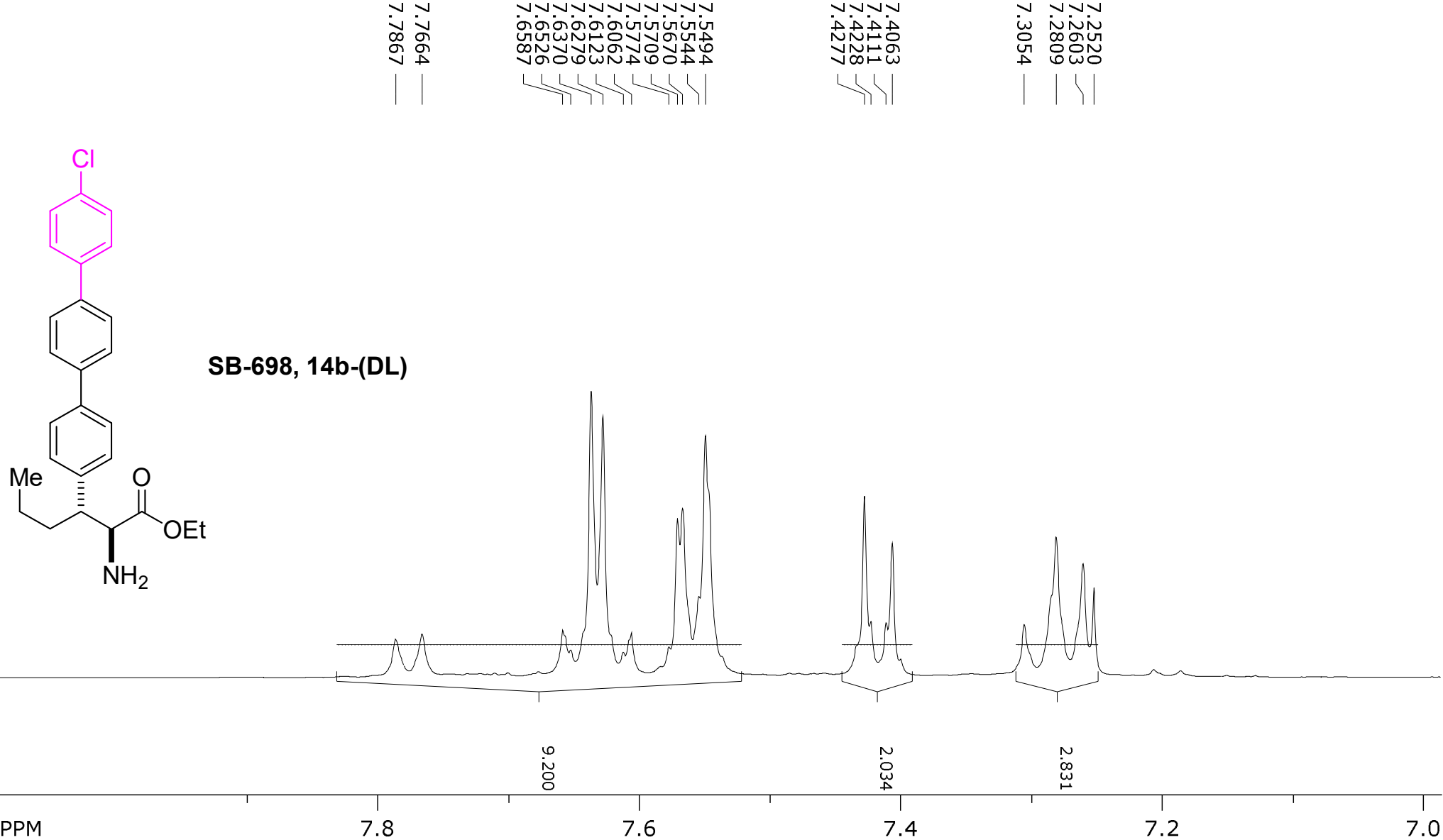


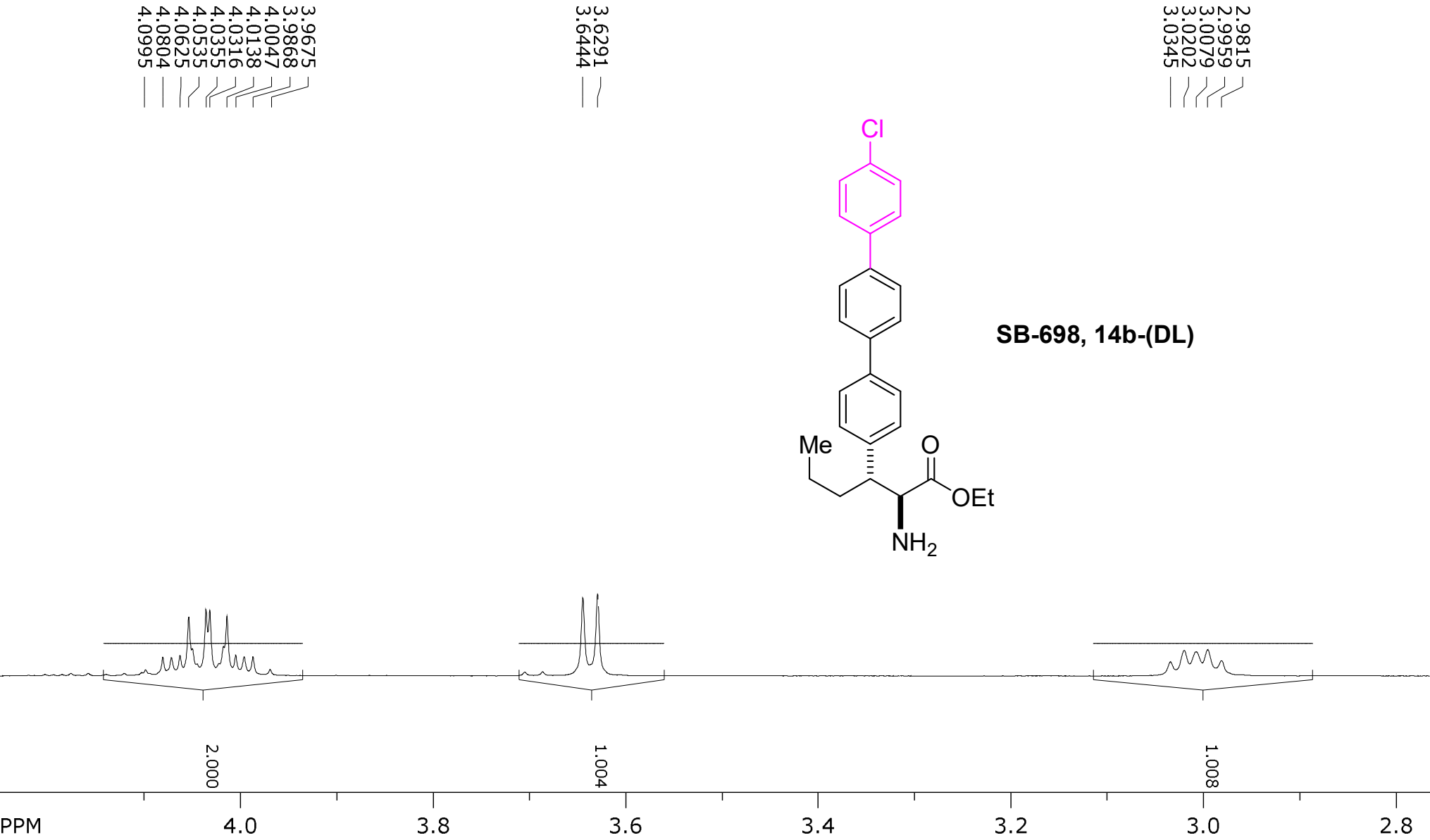


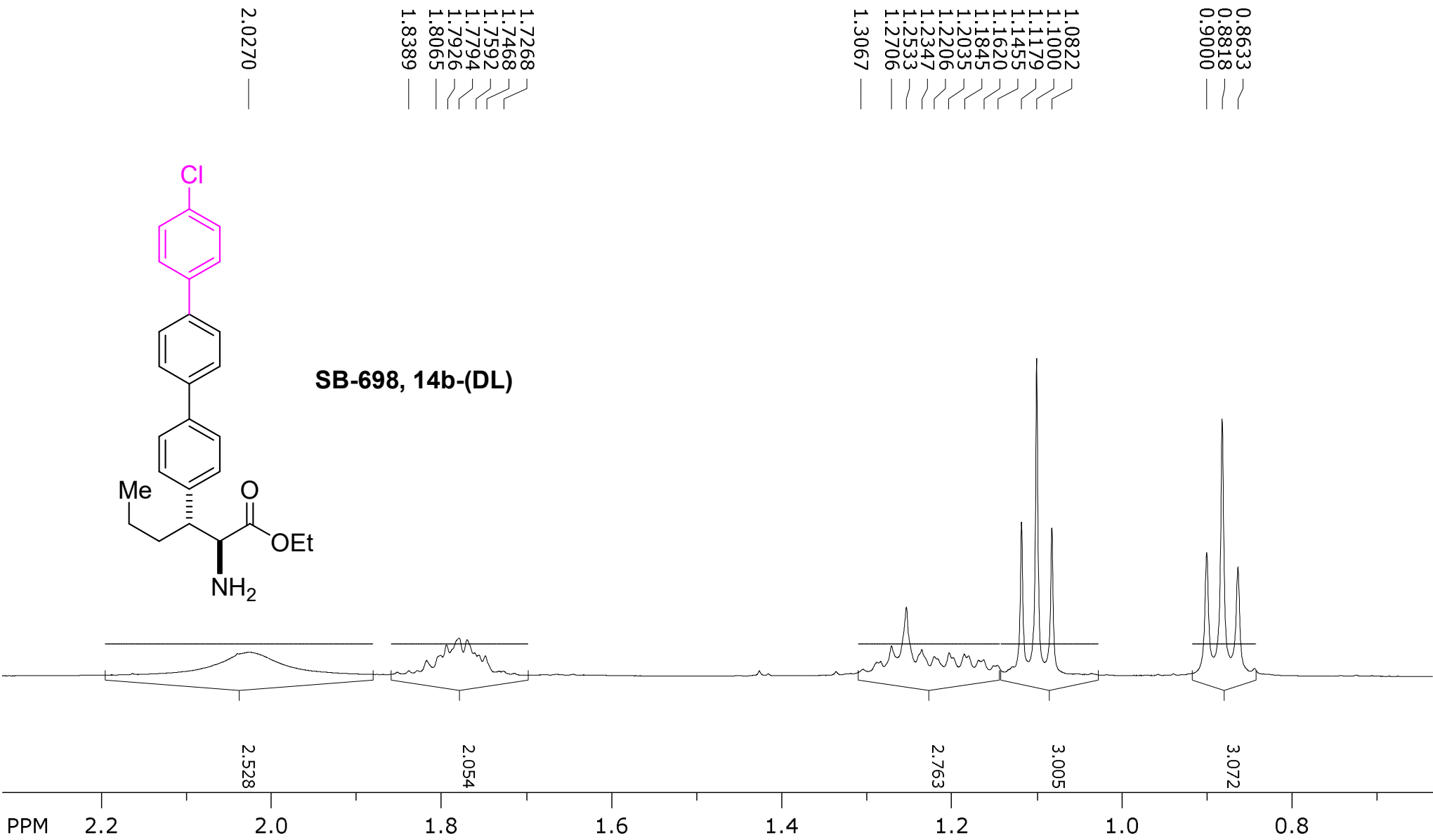


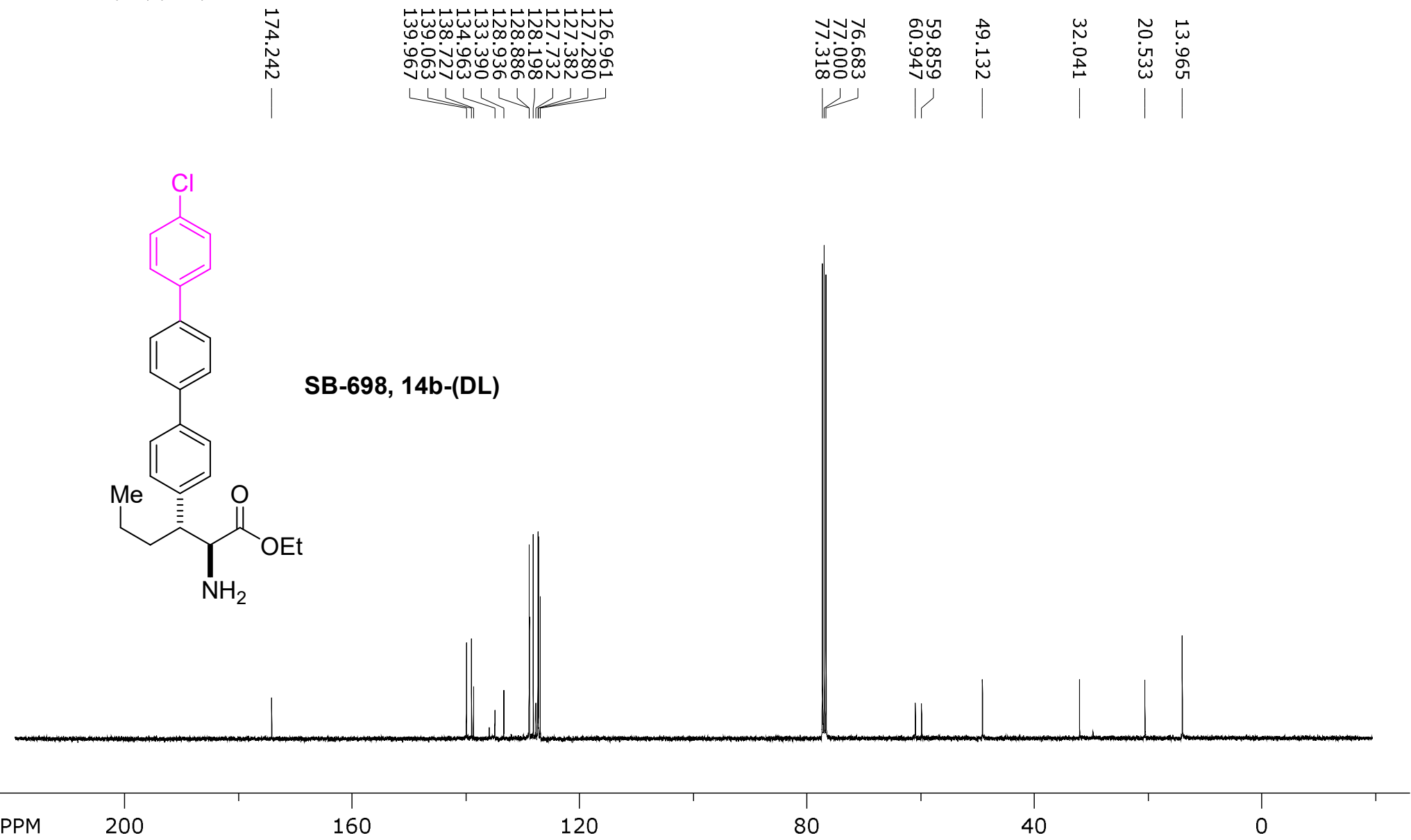


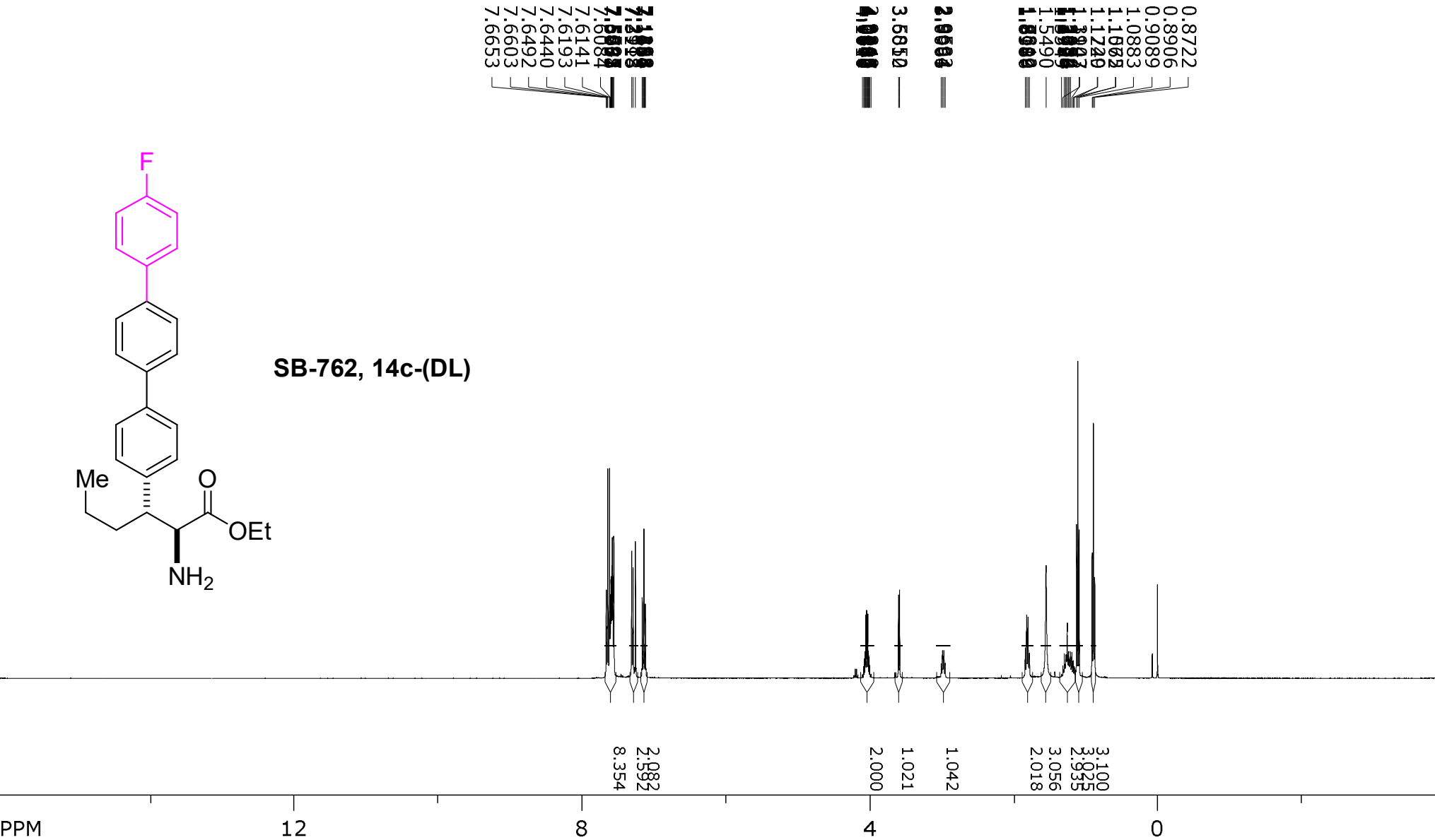
SB-698, 14b-(DL)

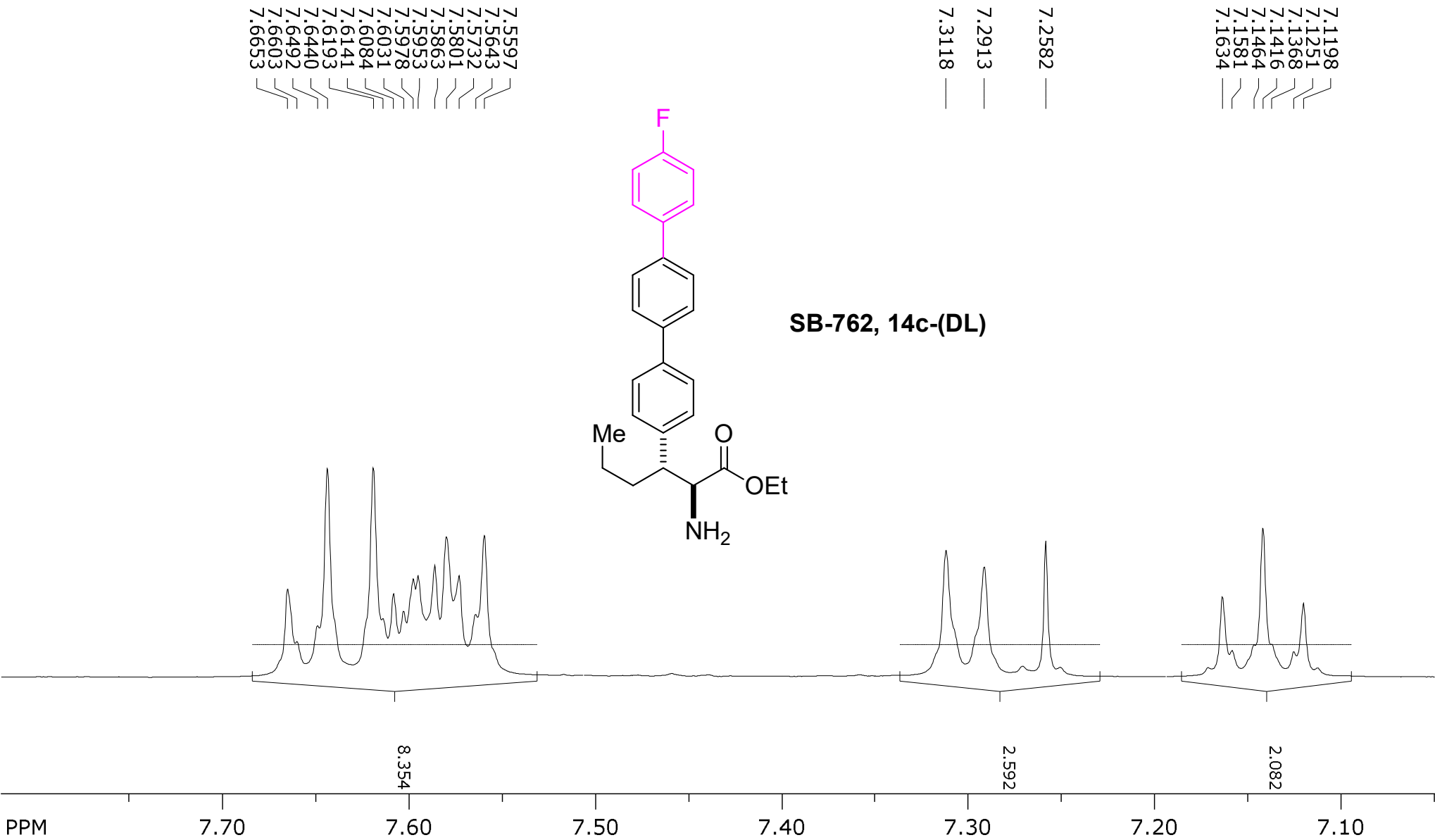


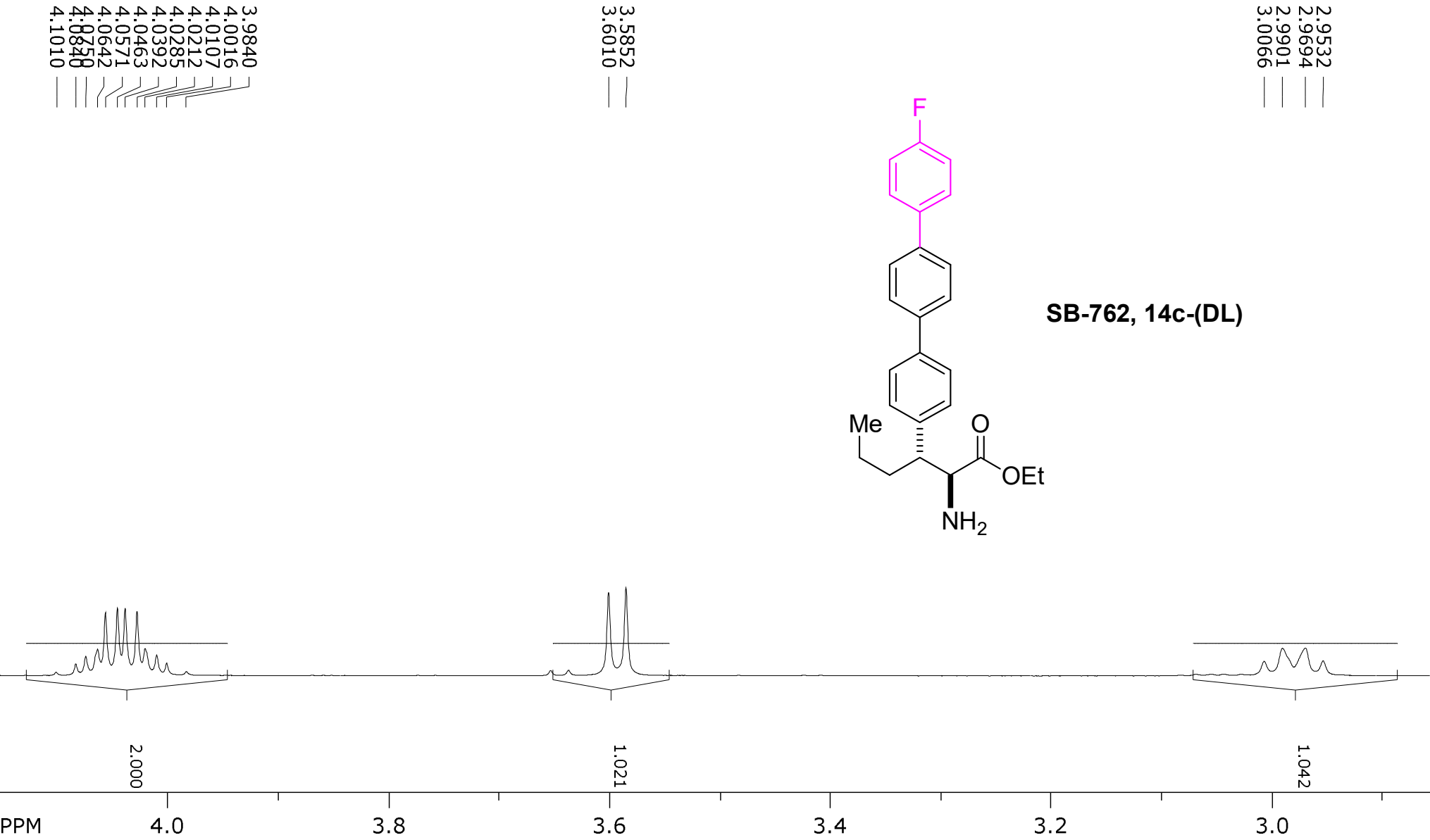


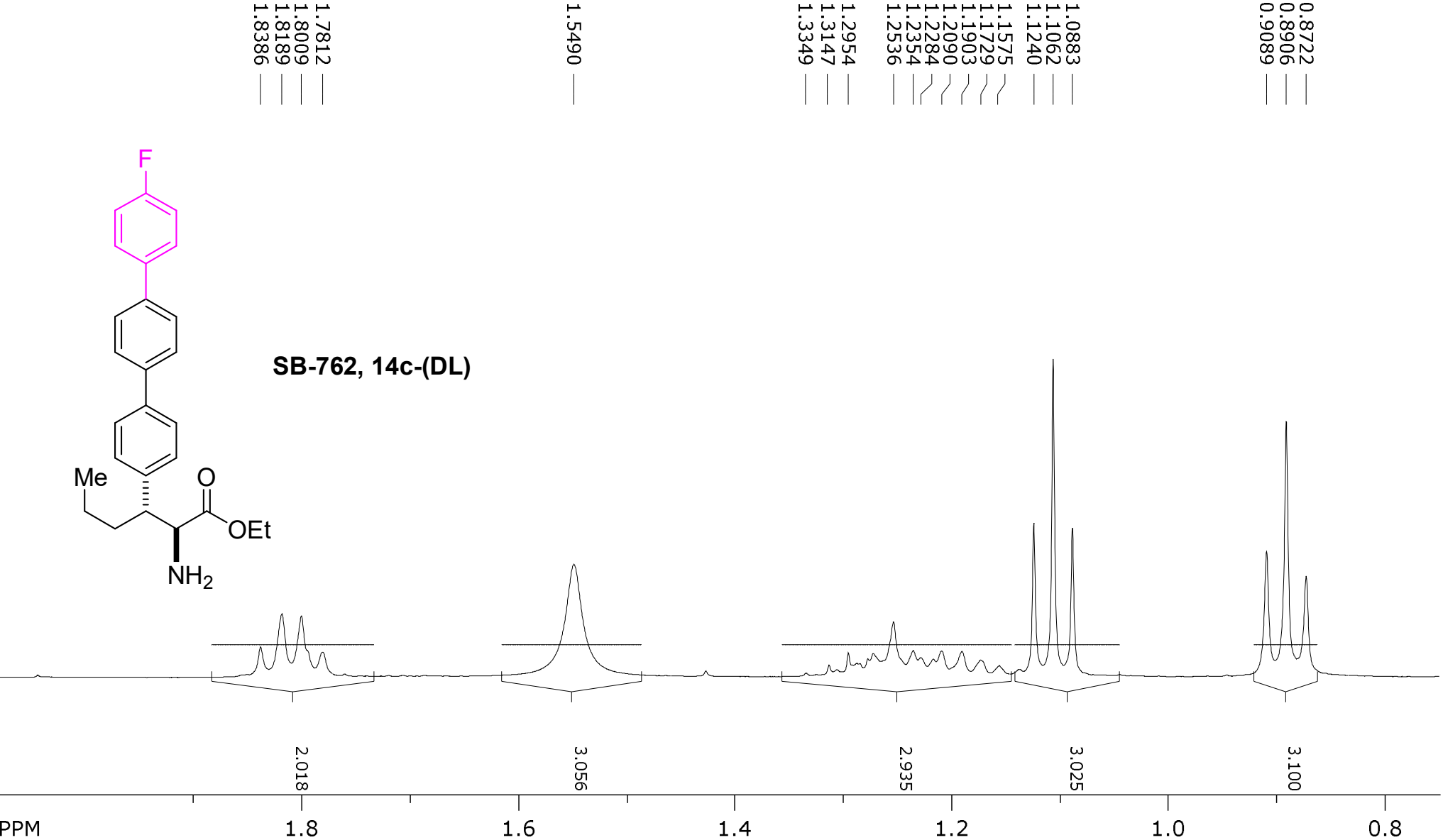


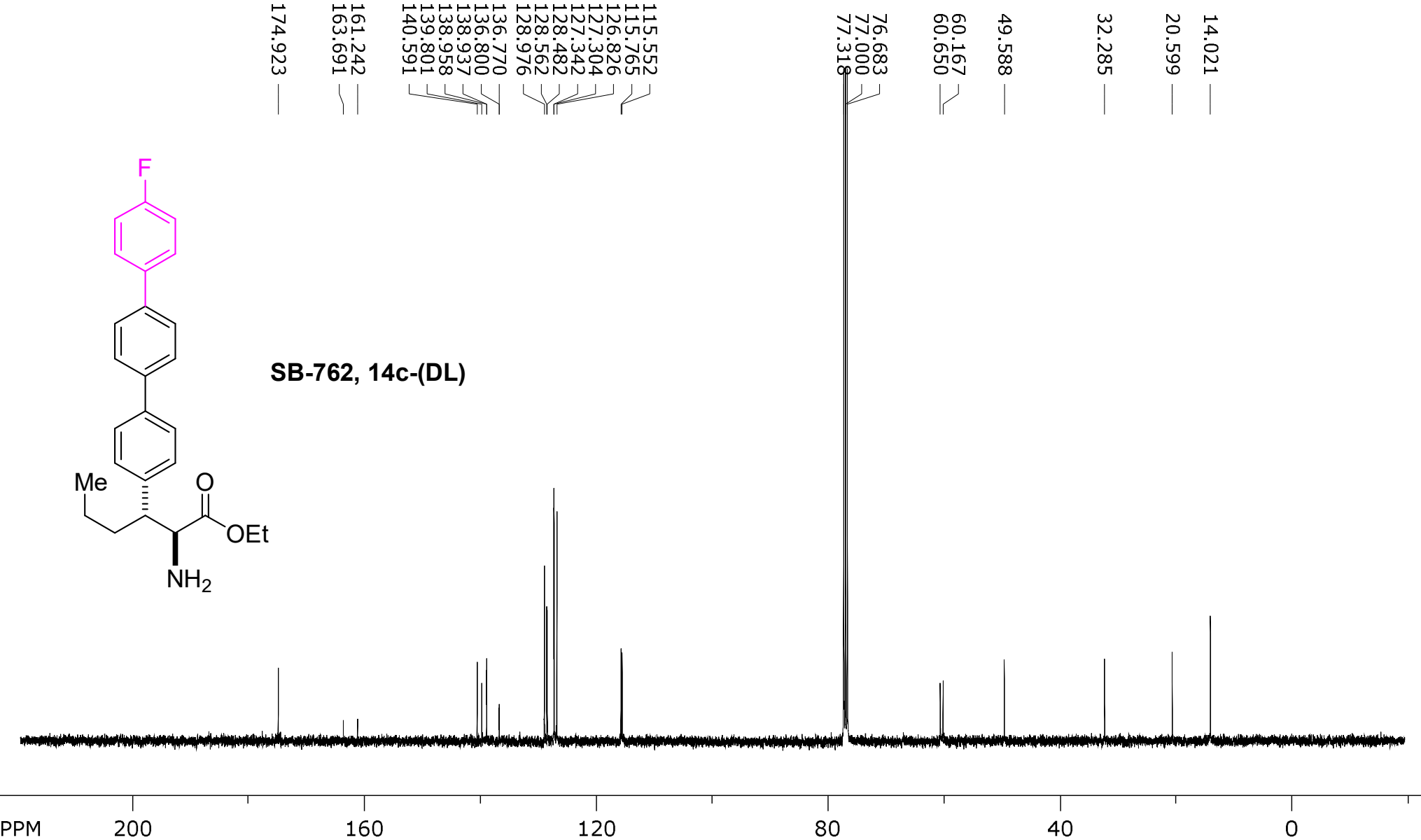


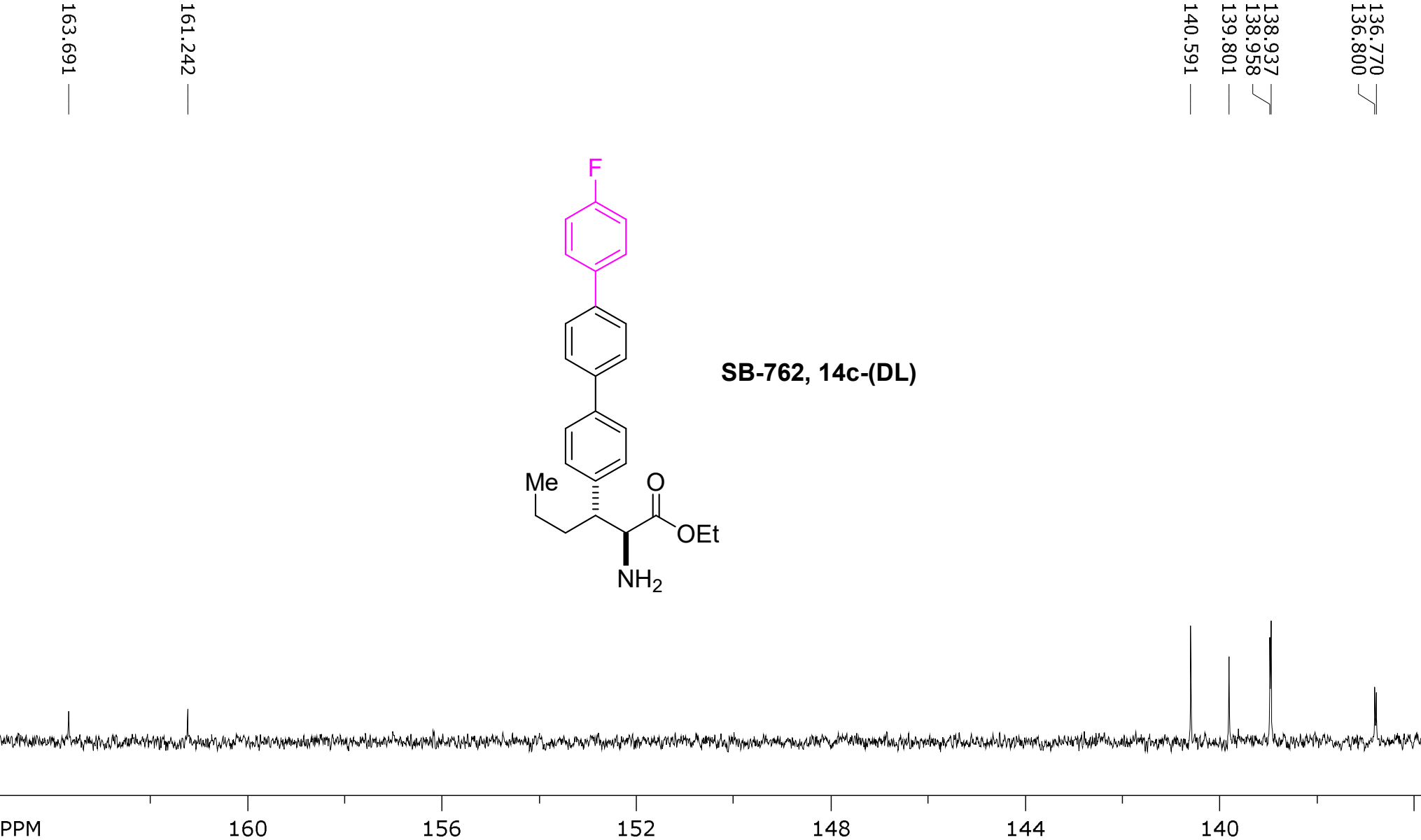


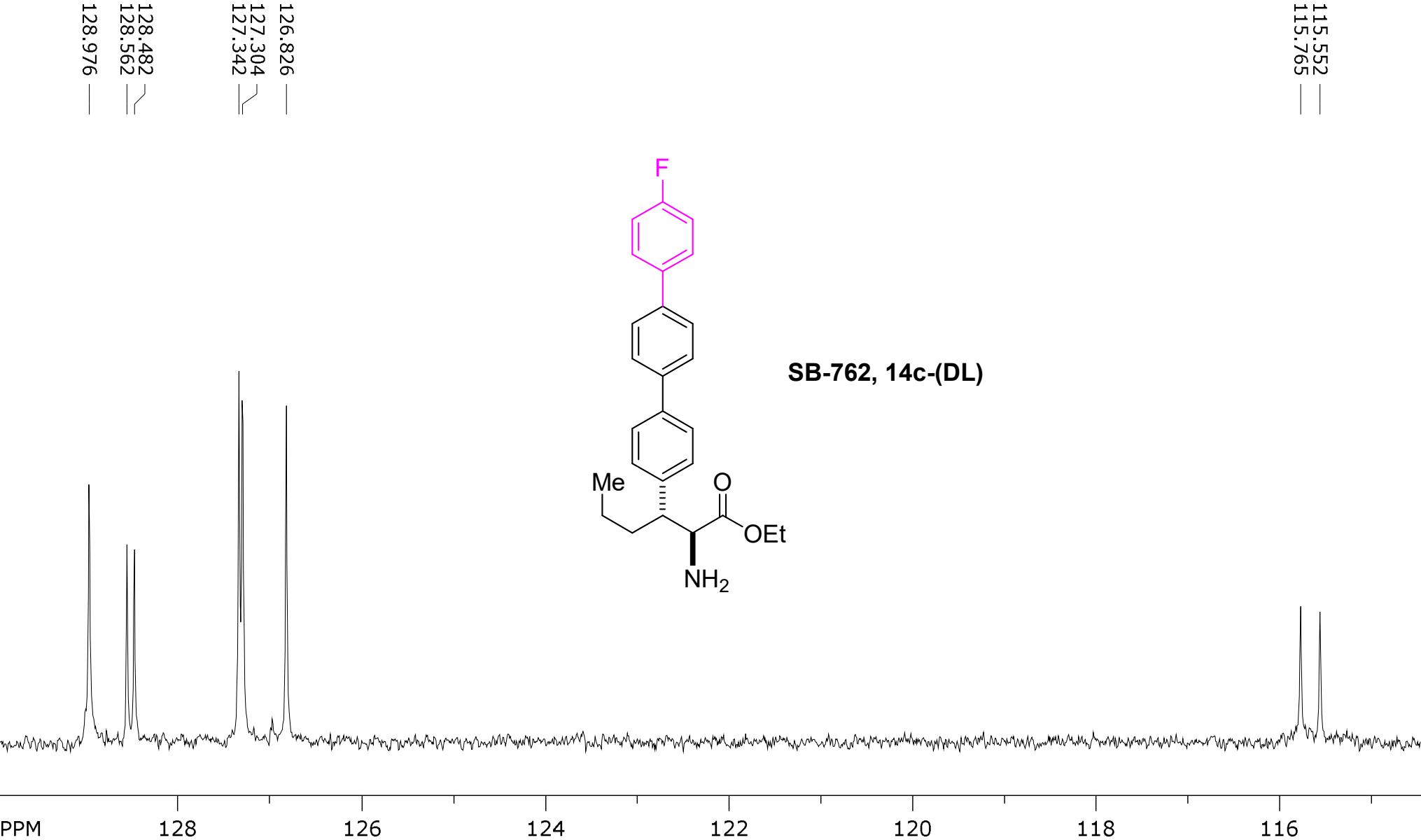


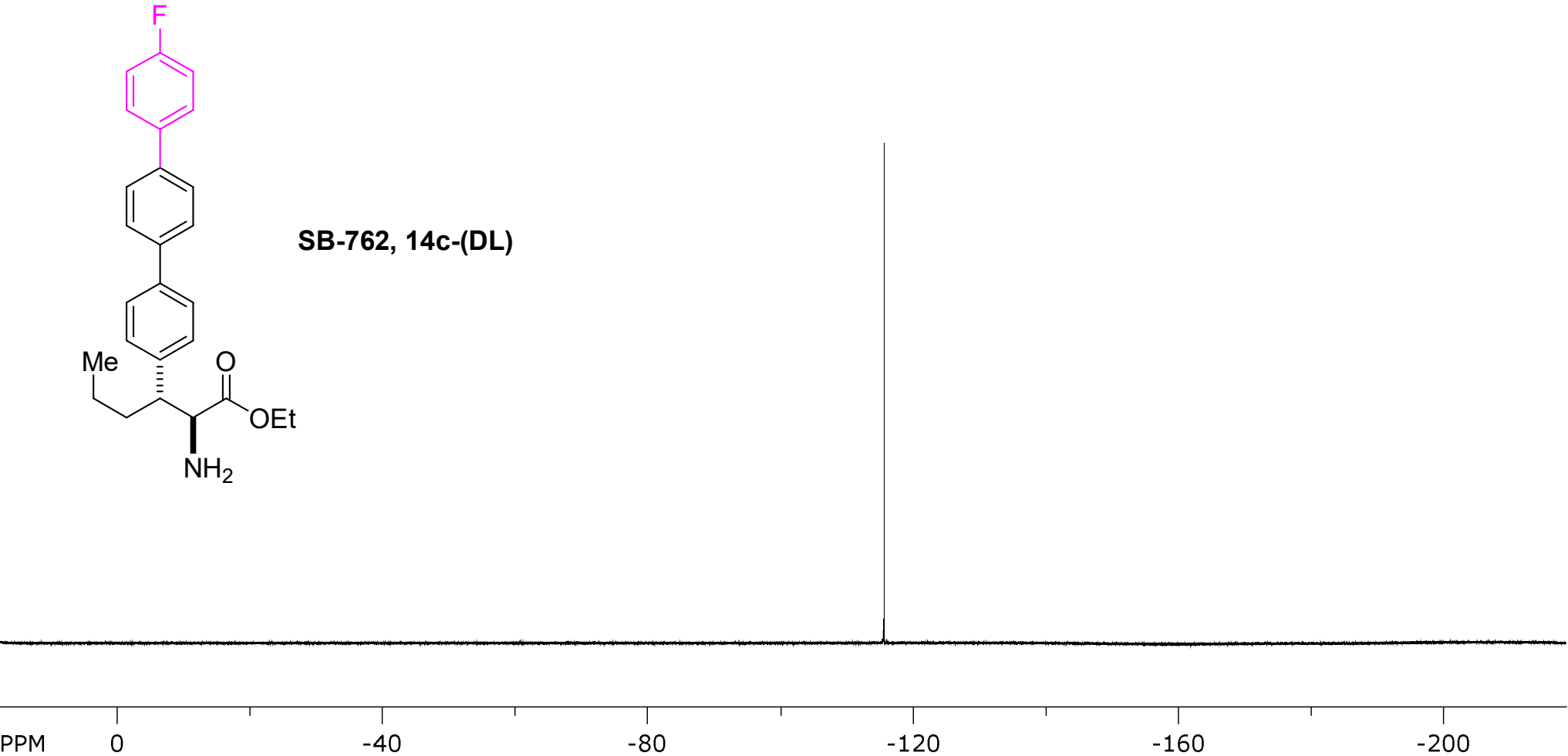


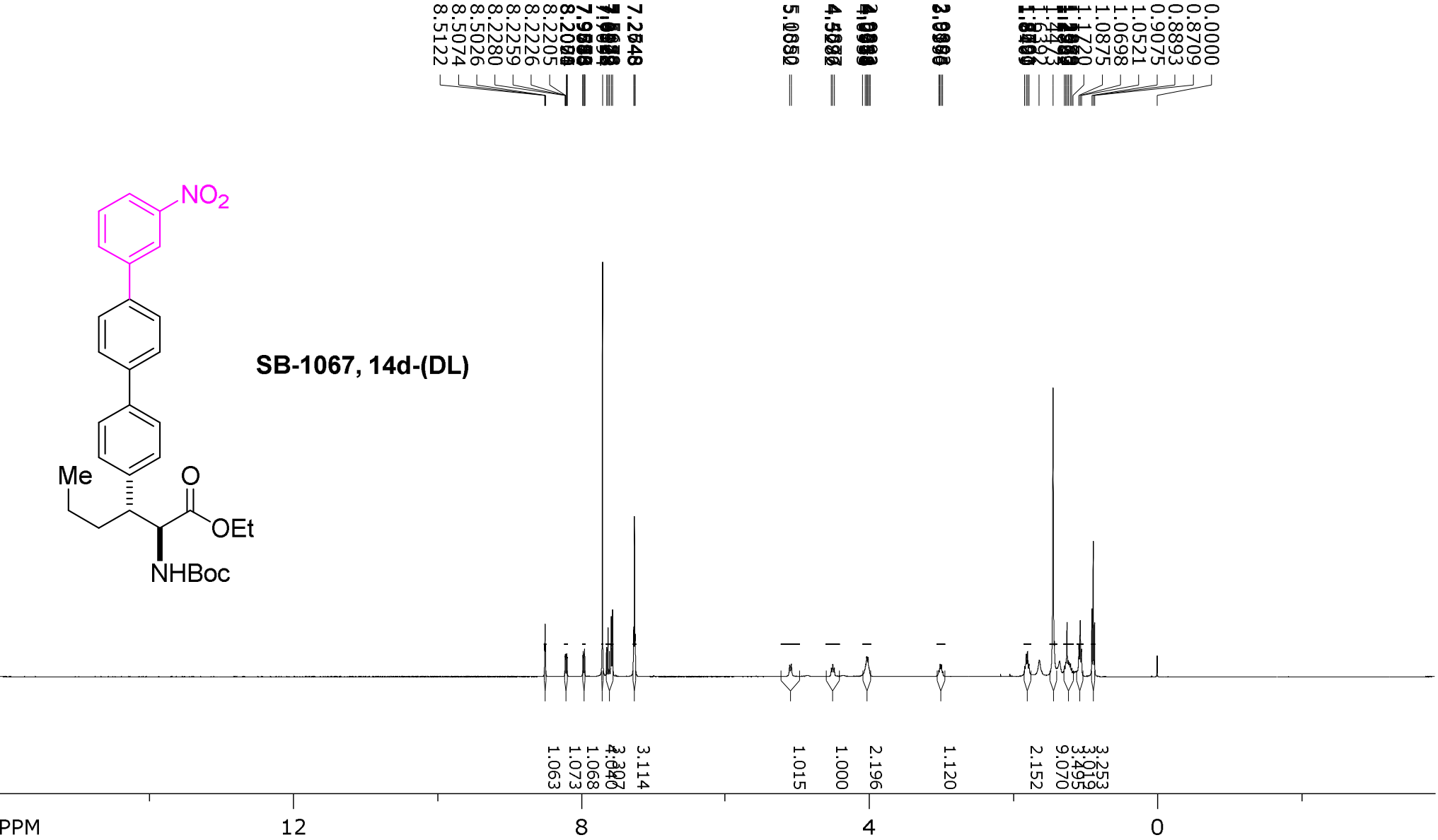


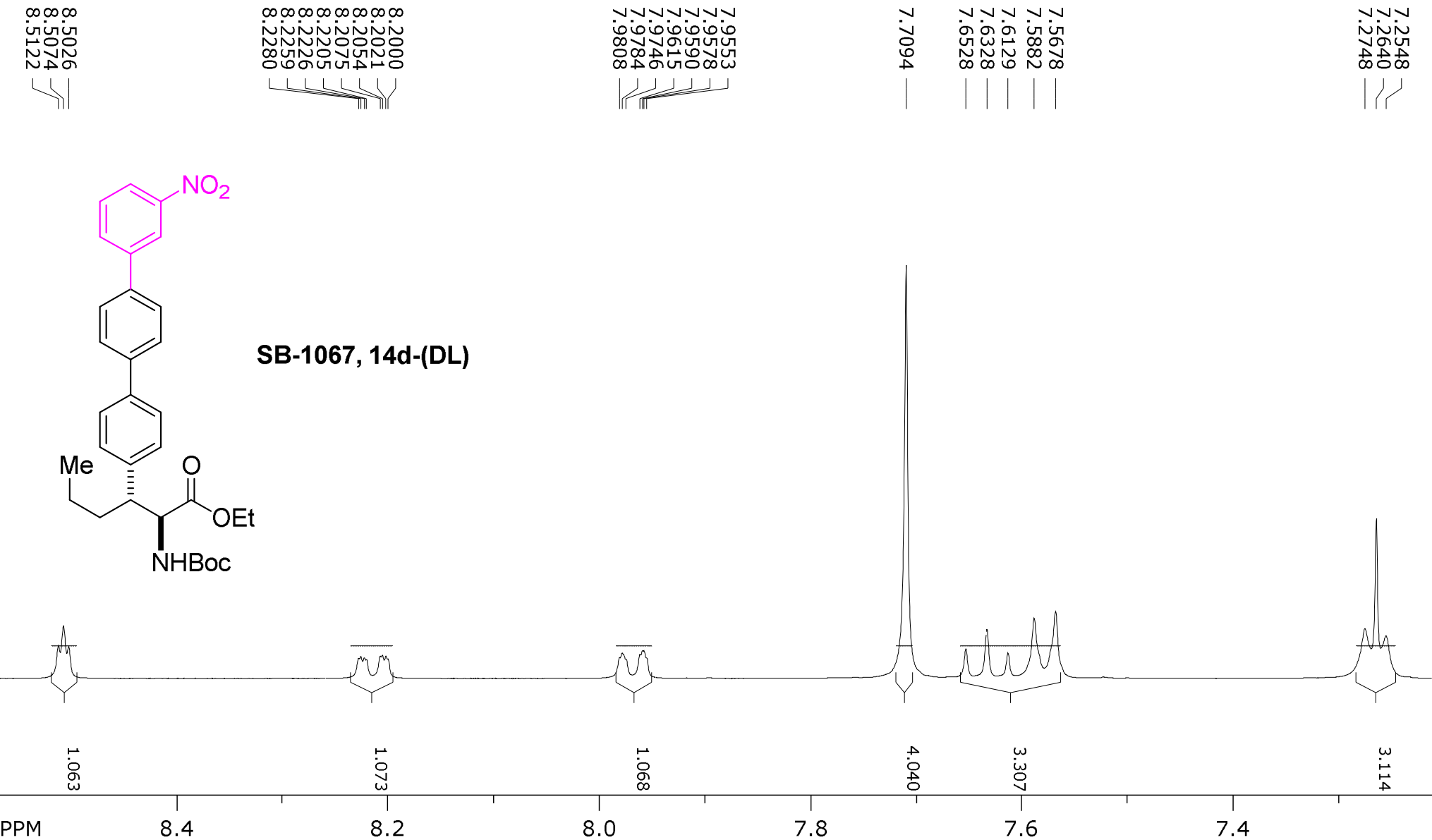


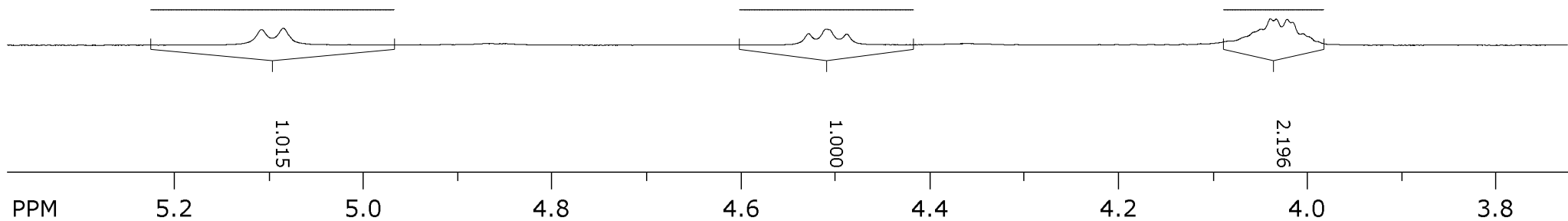
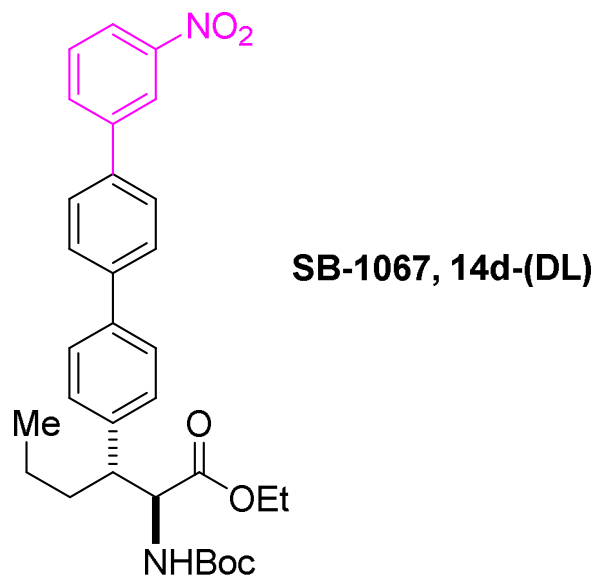
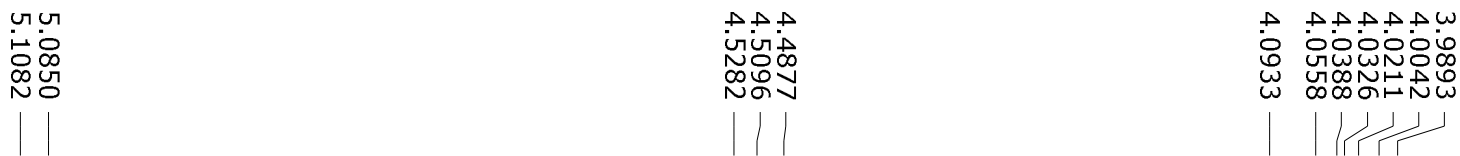


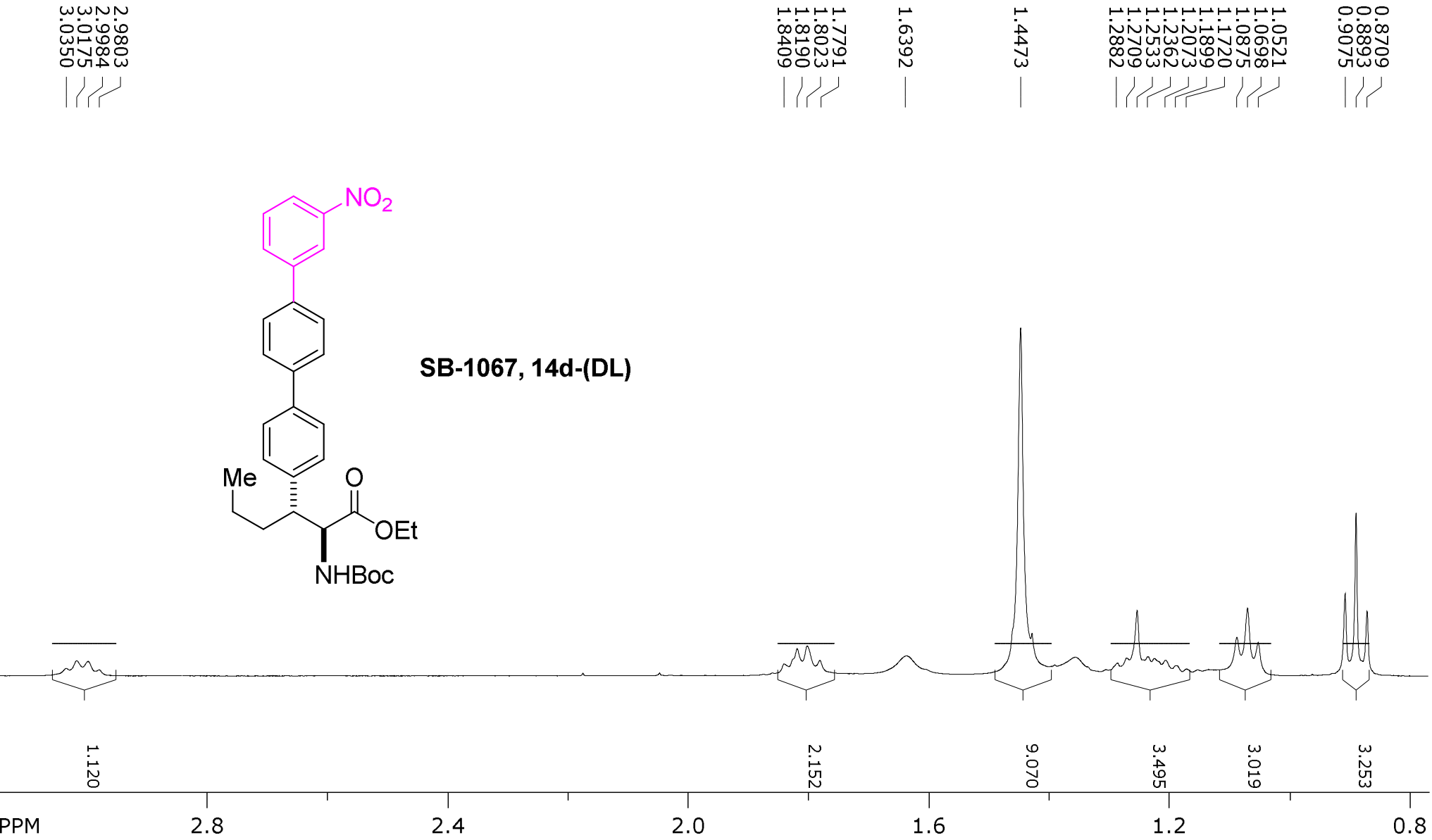


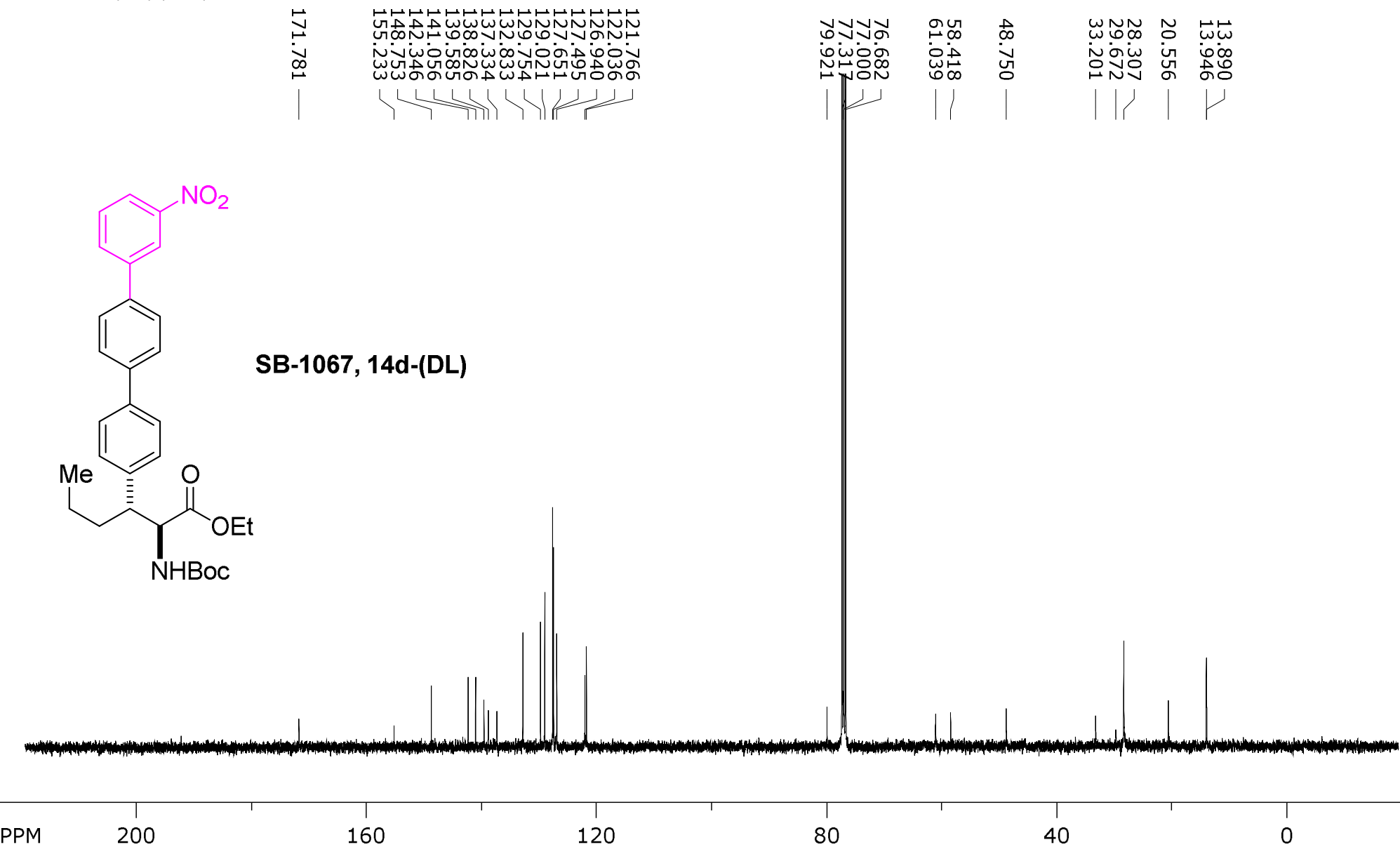


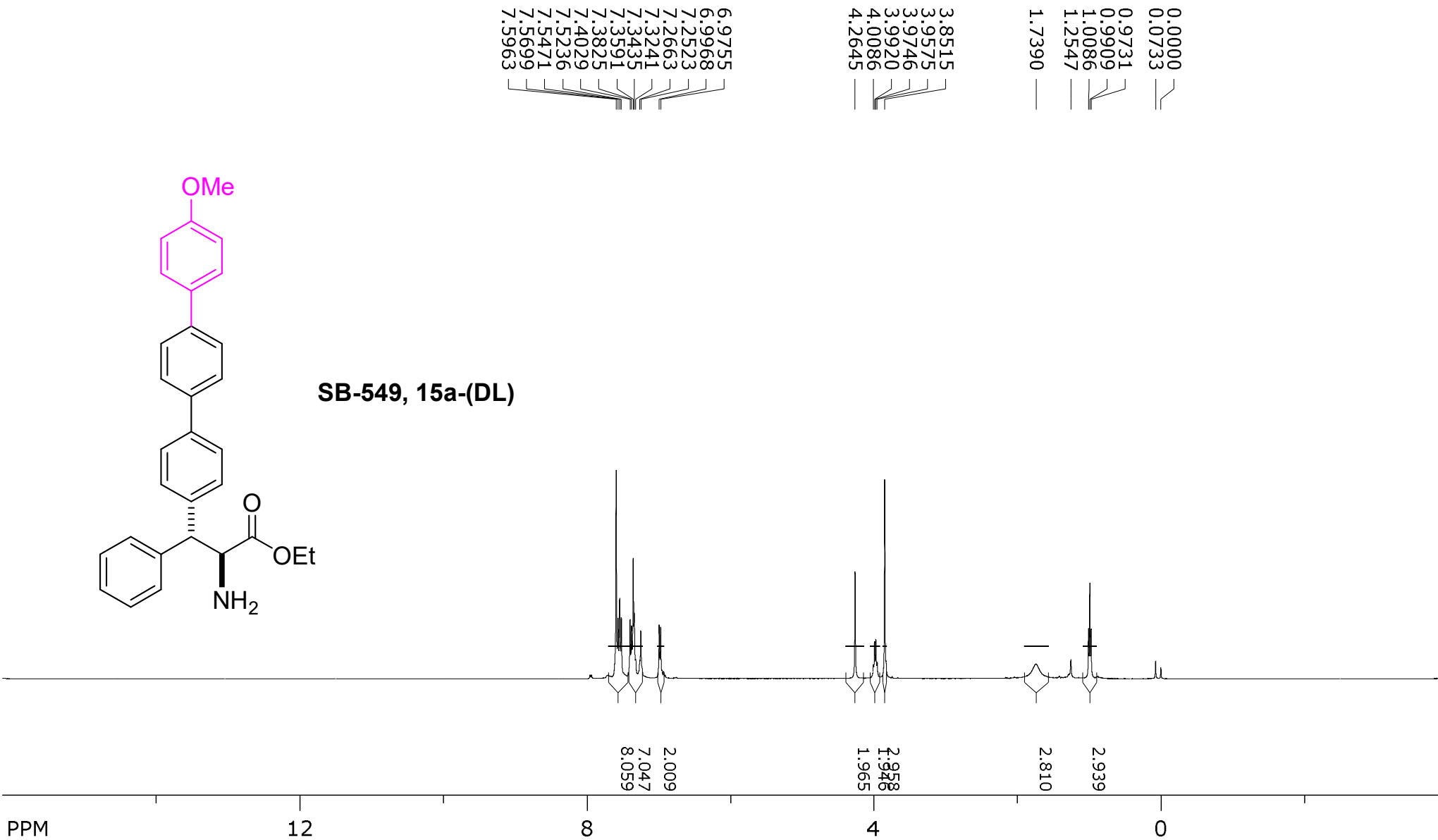


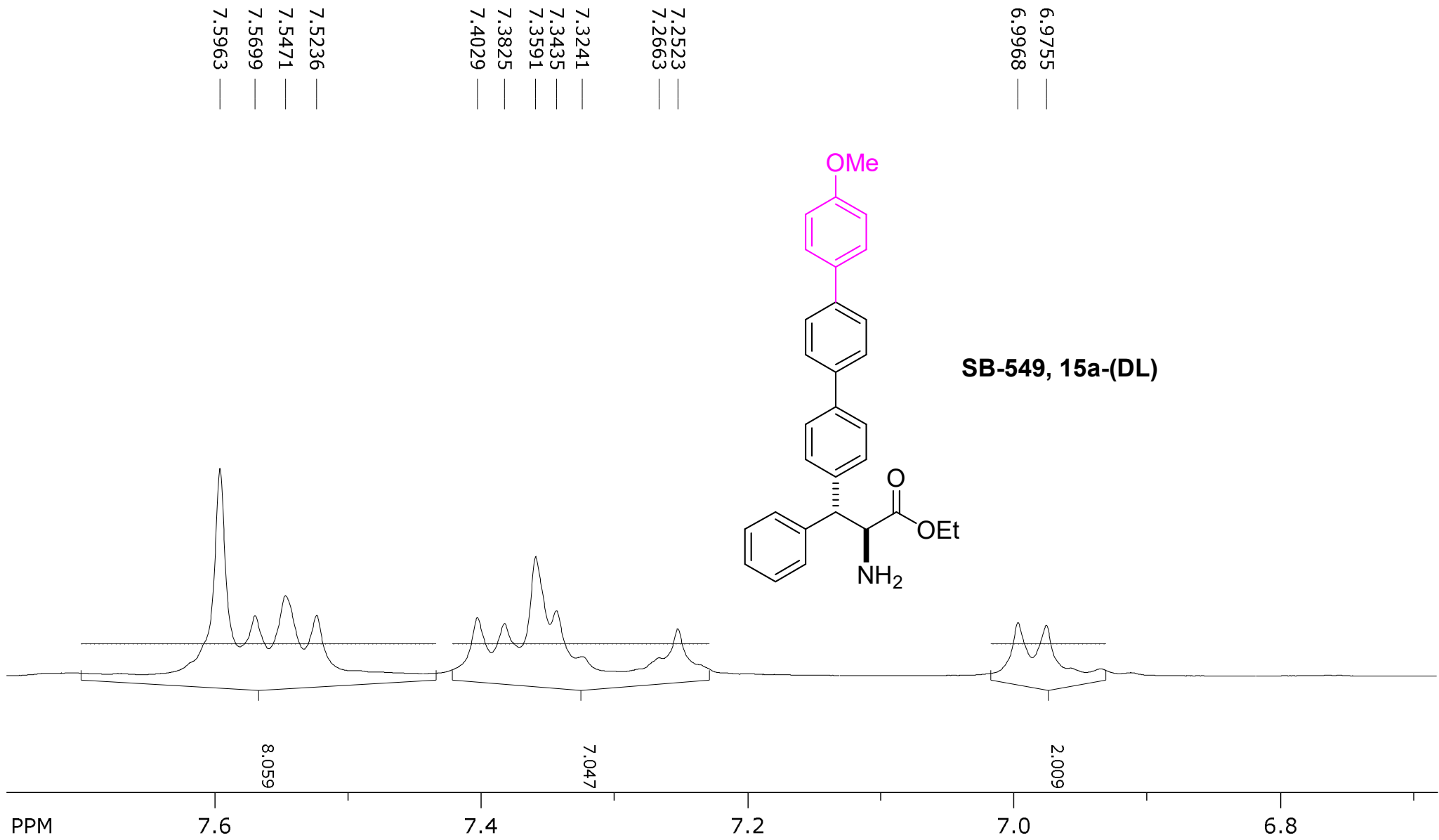




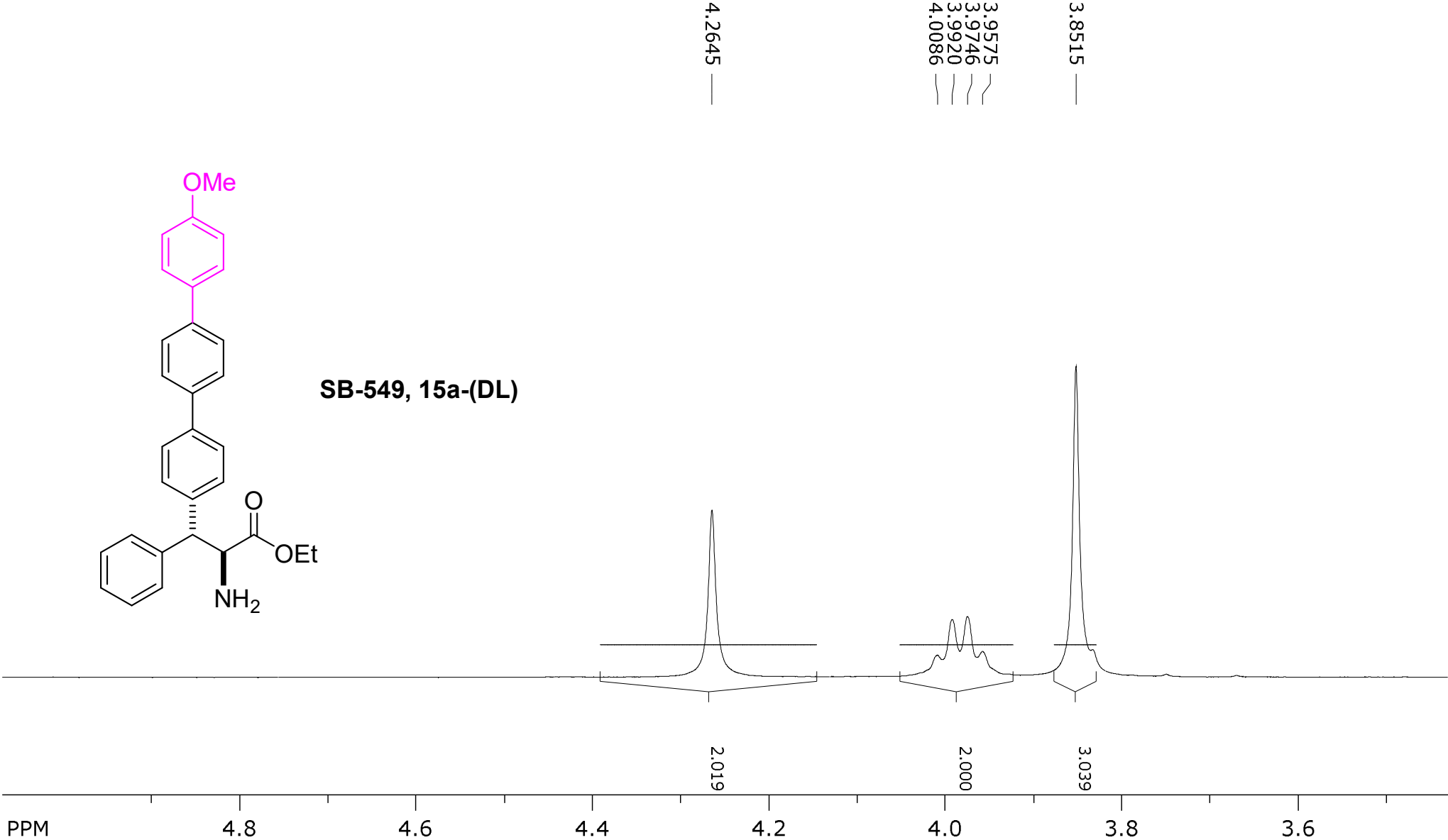
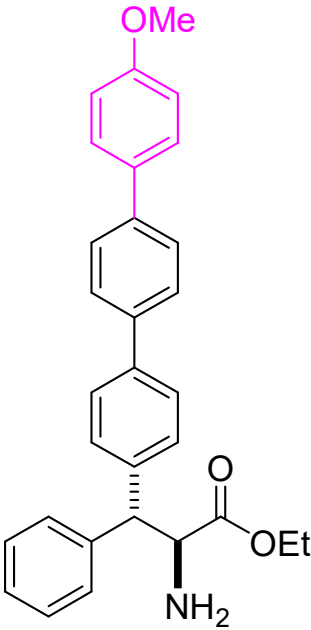


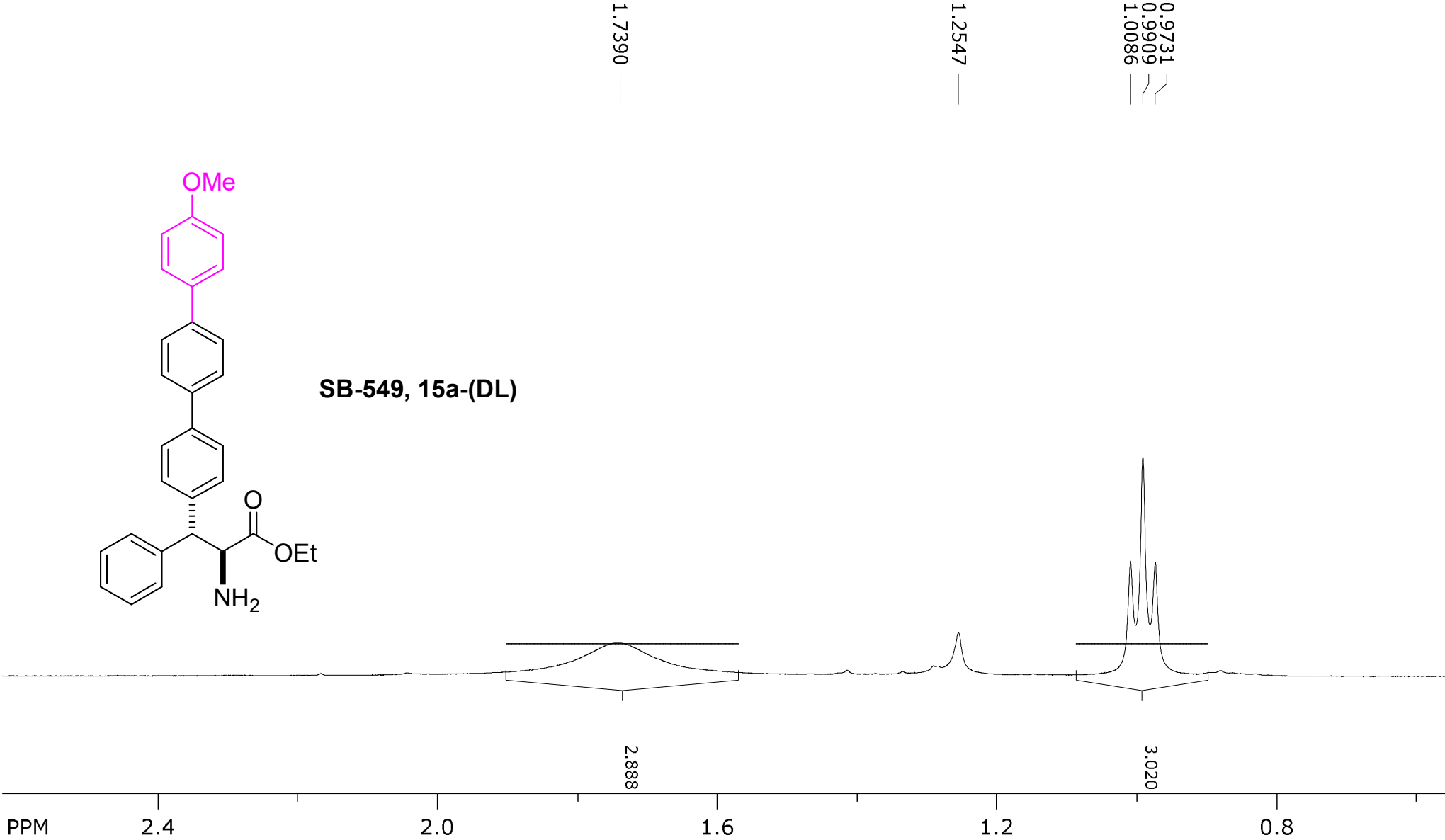


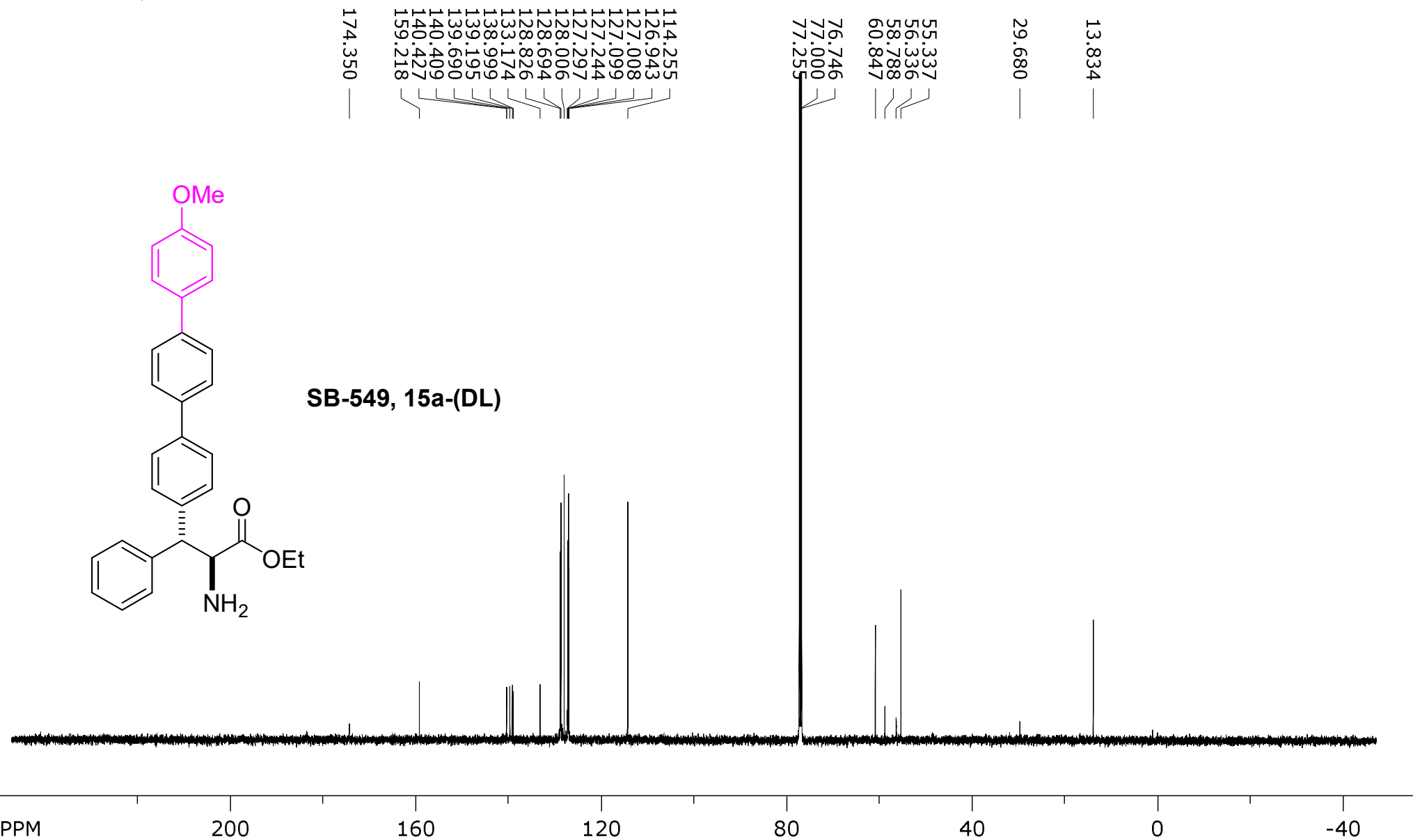


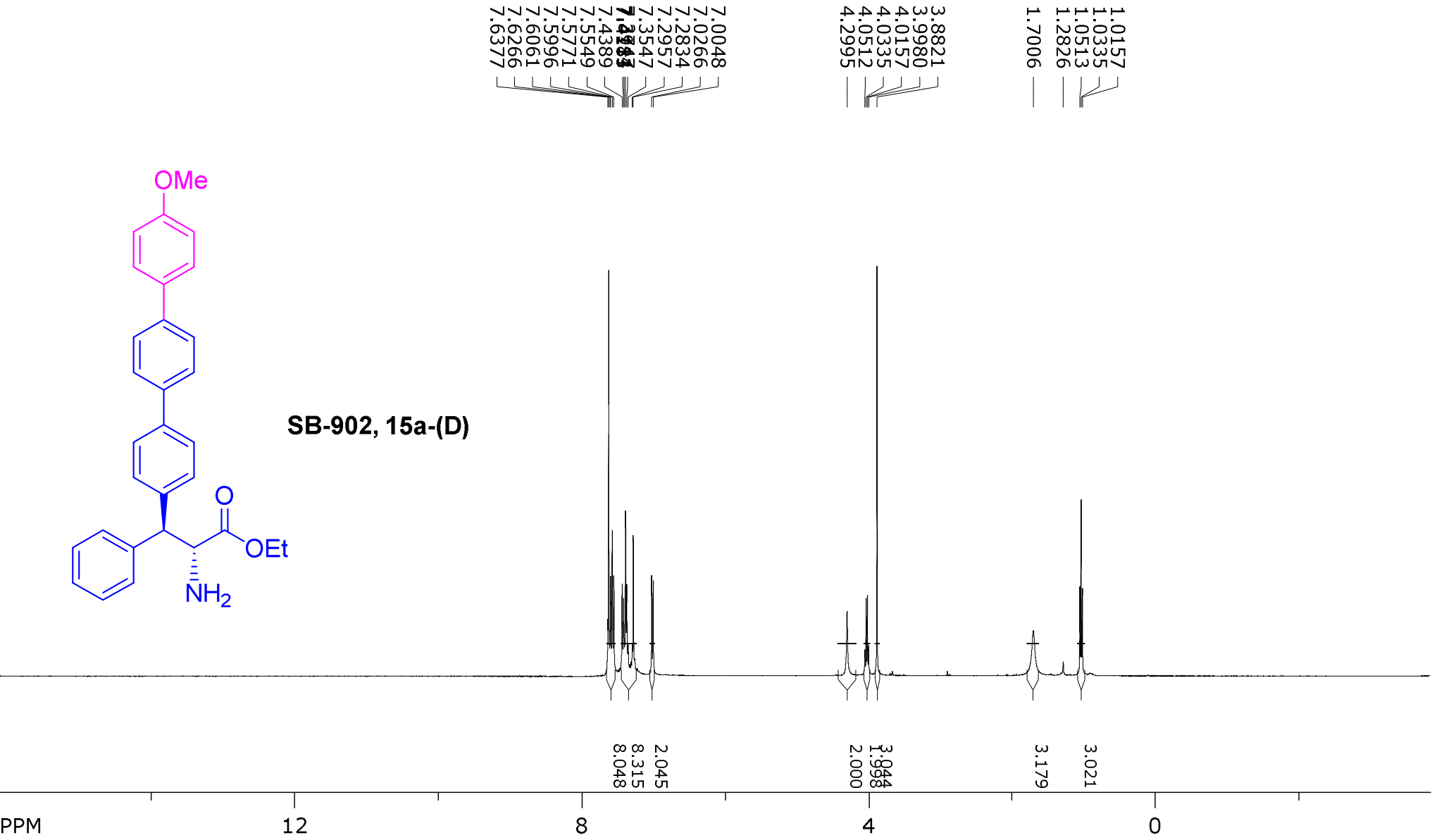


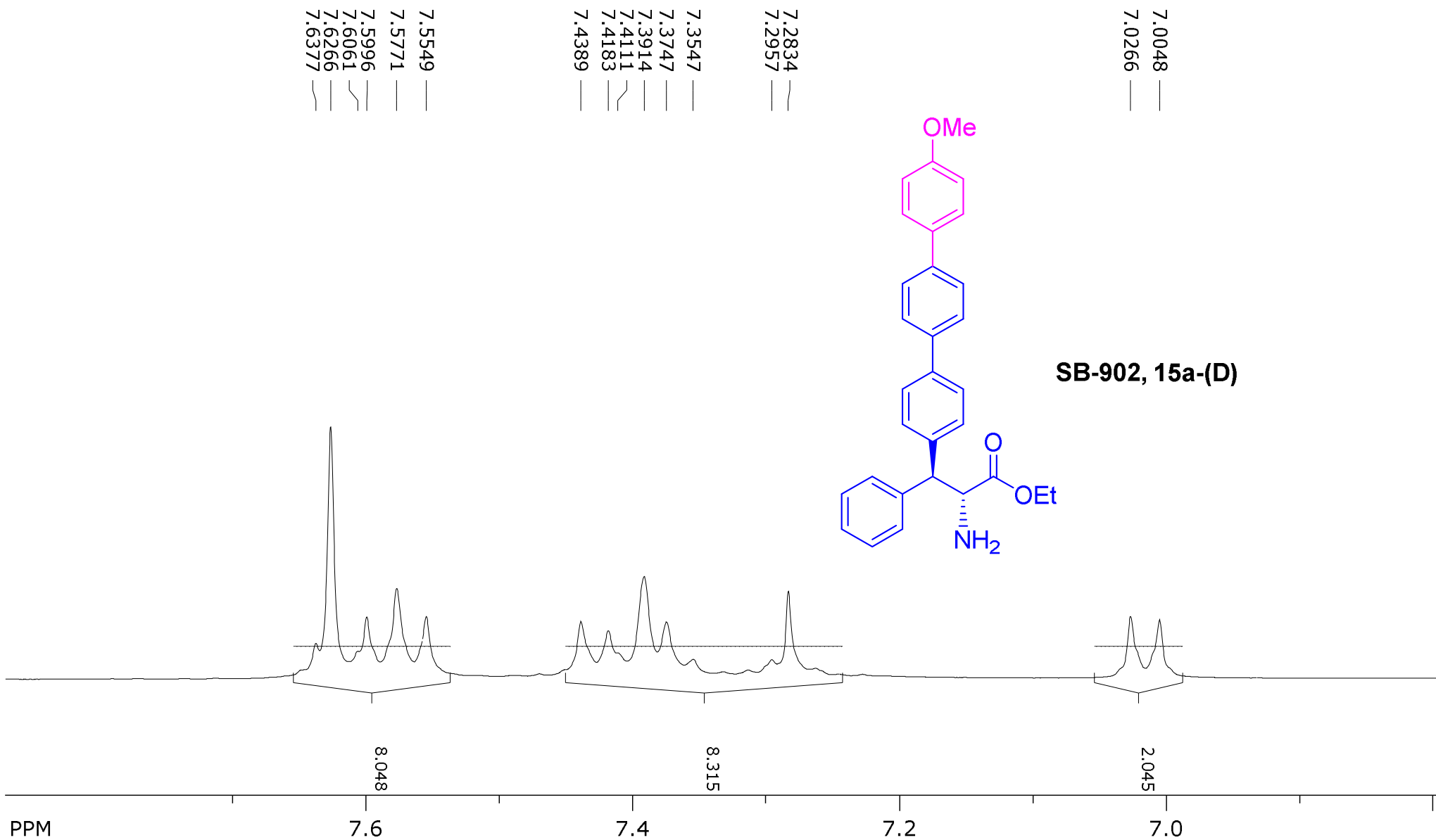
SB-549, 15a-(DL)

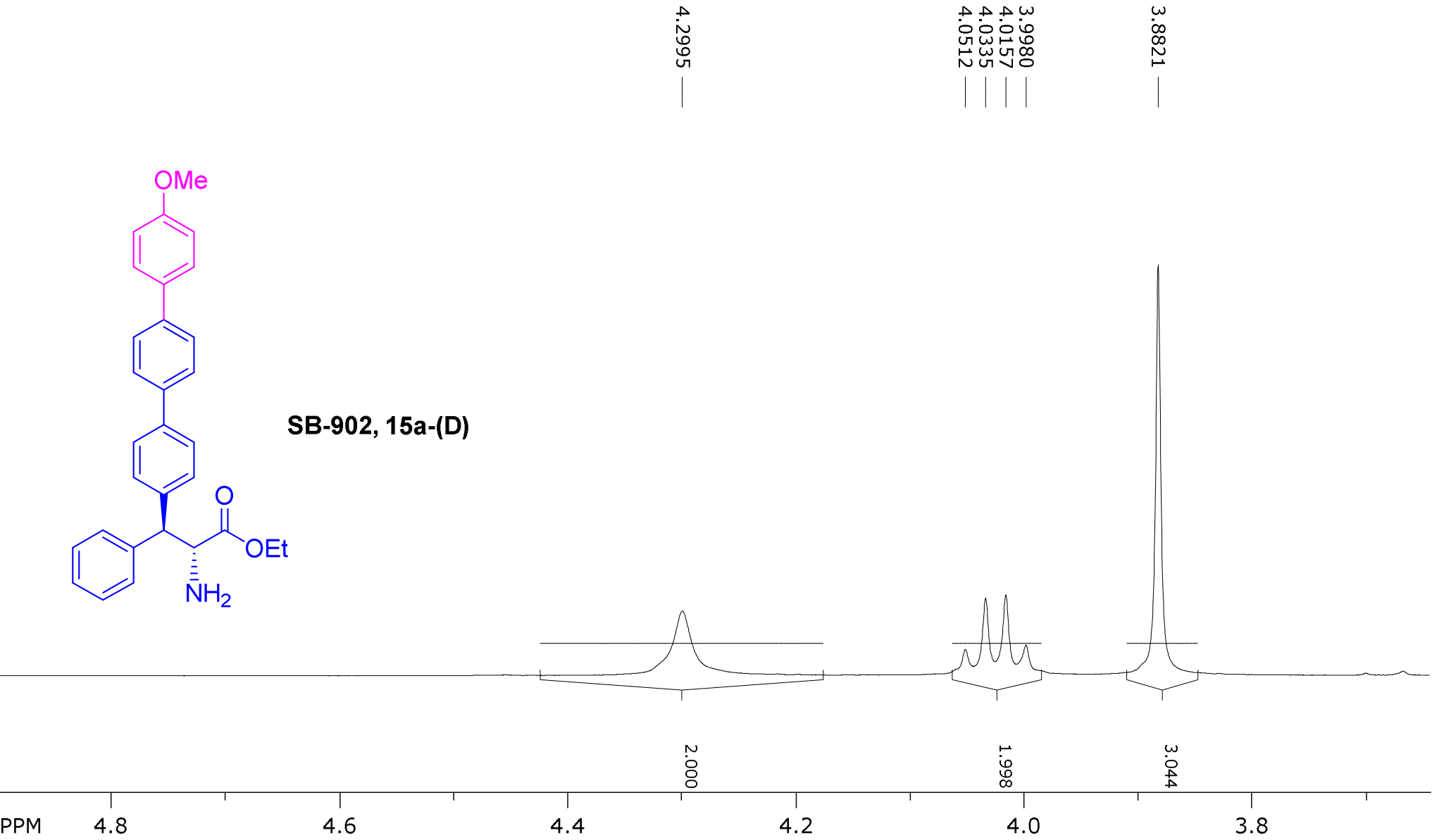


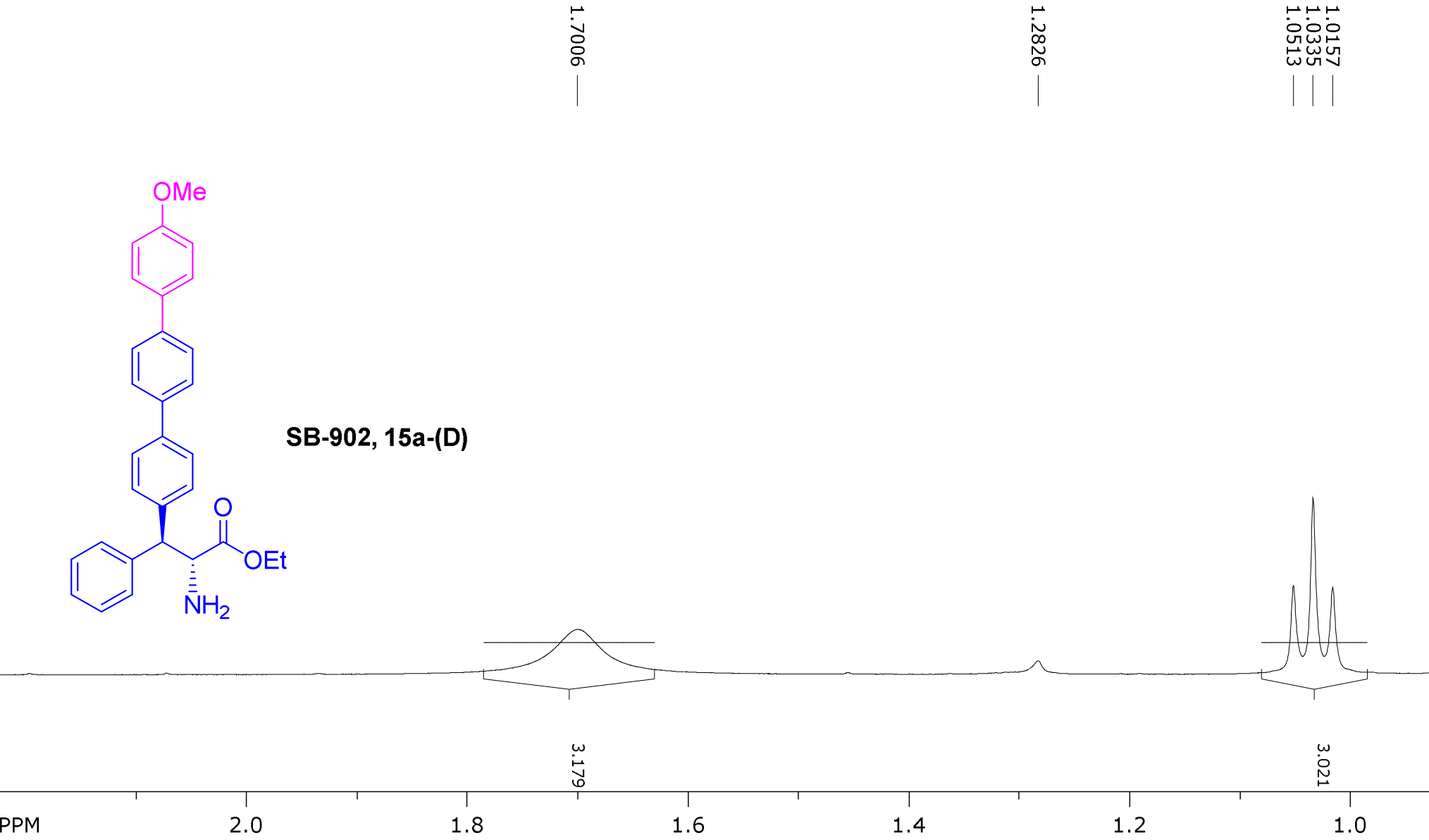


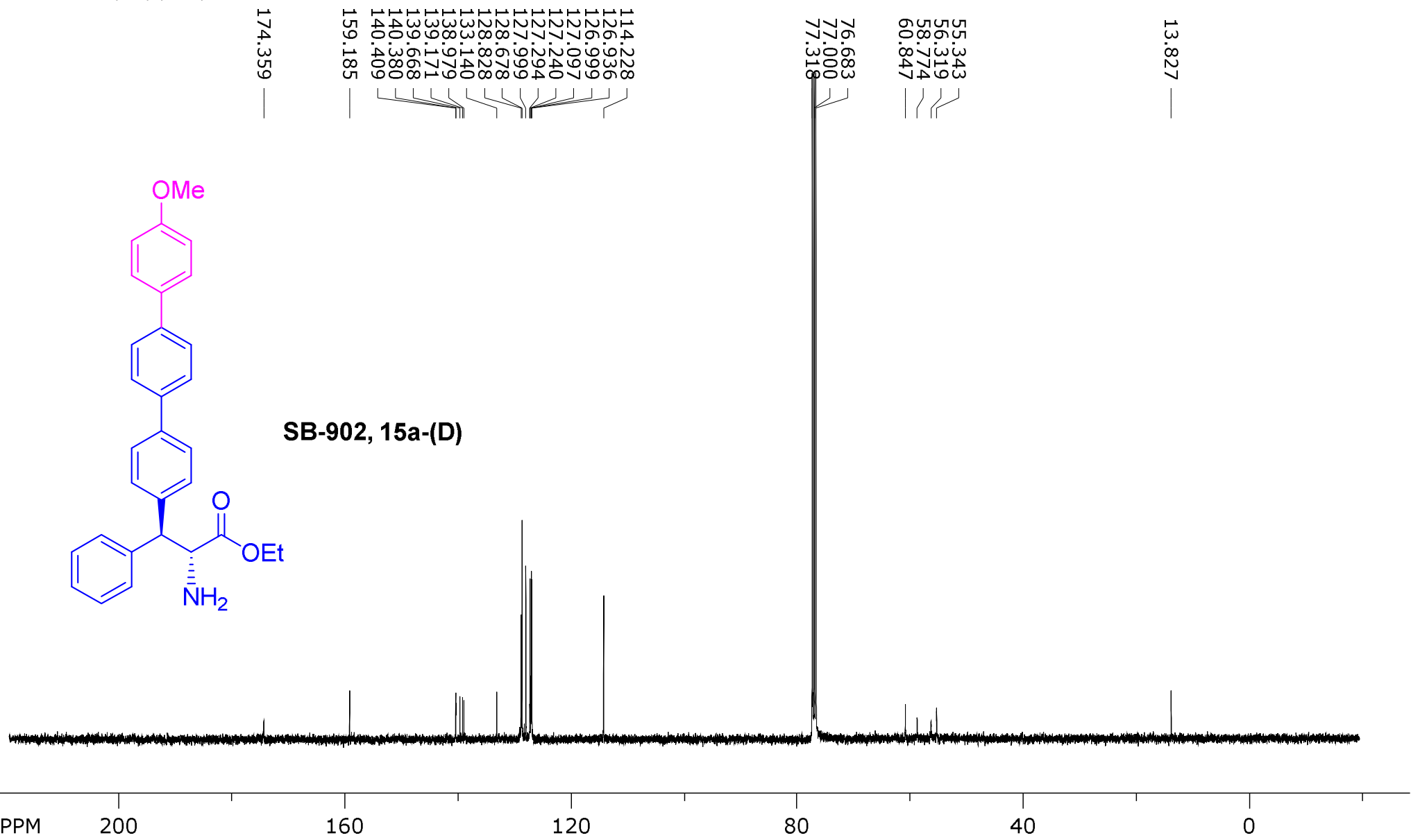


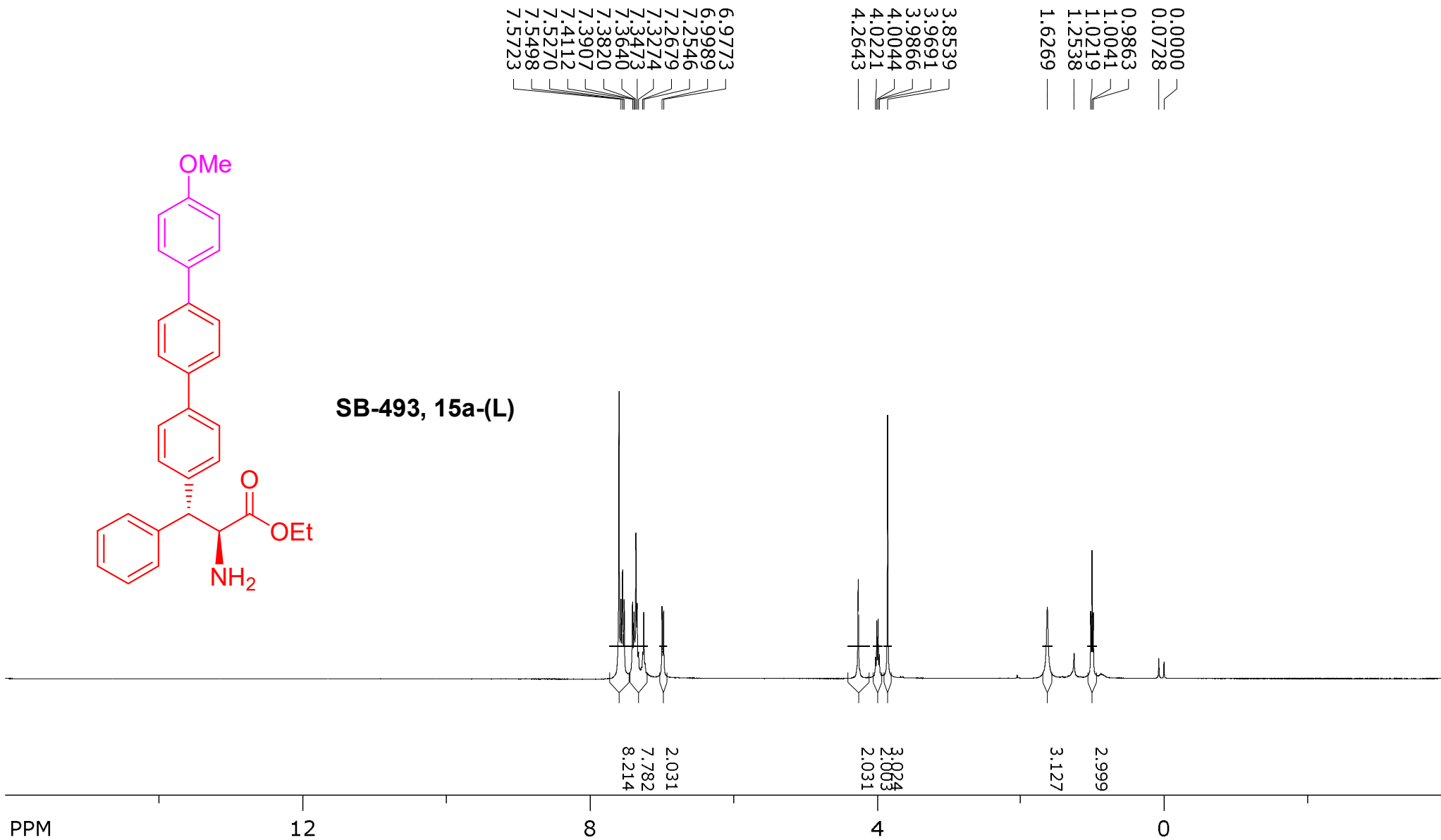


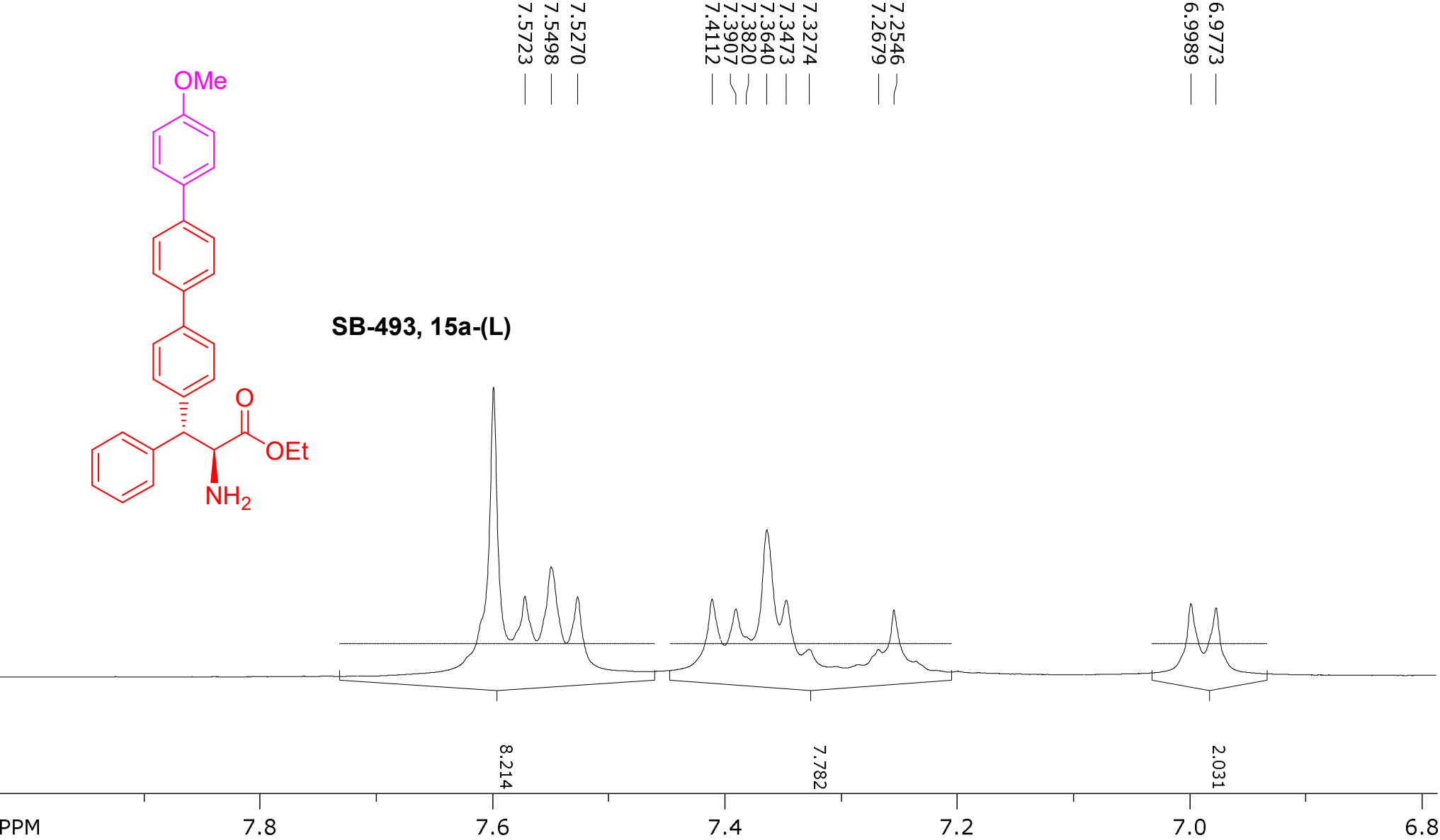


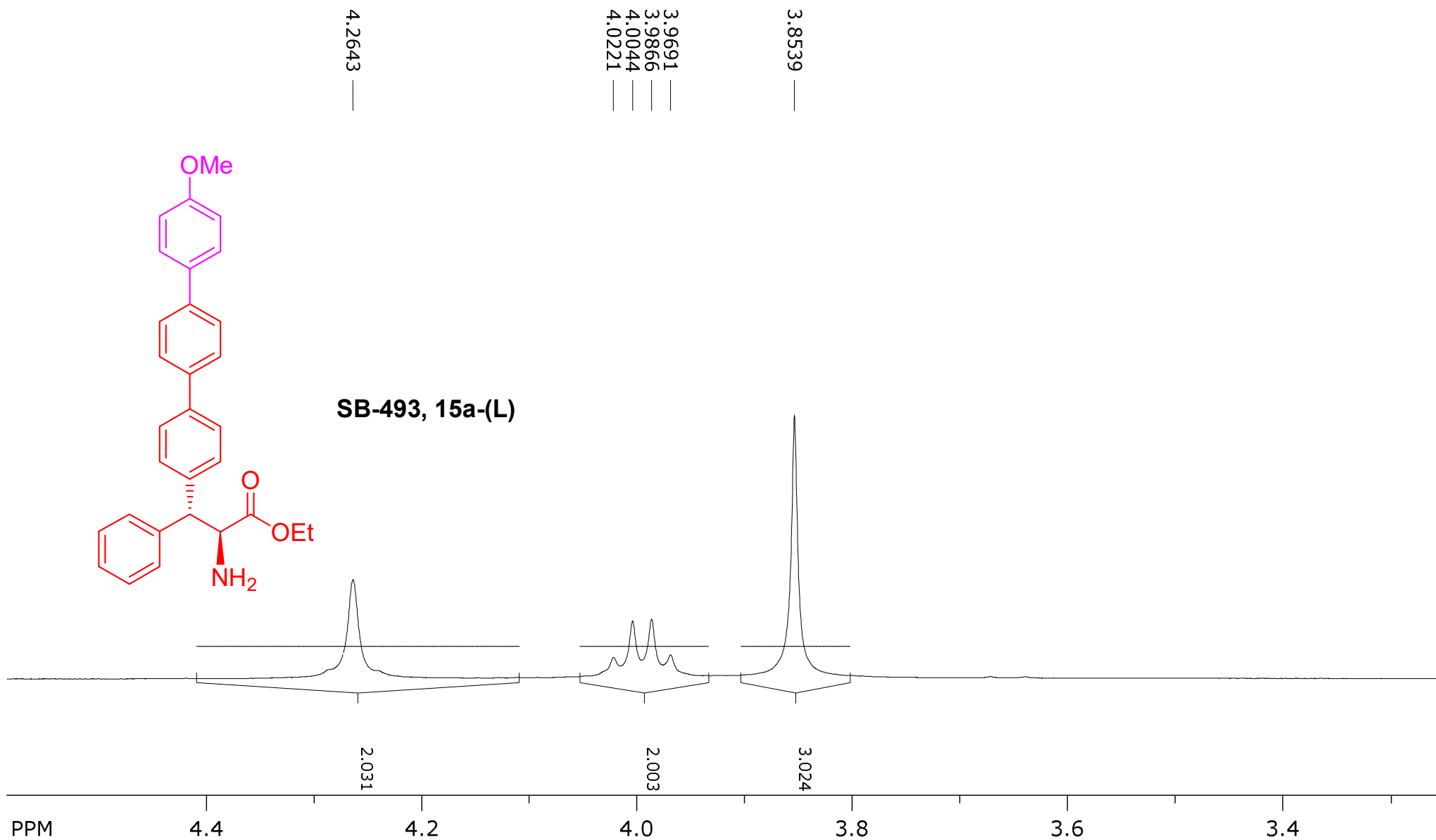




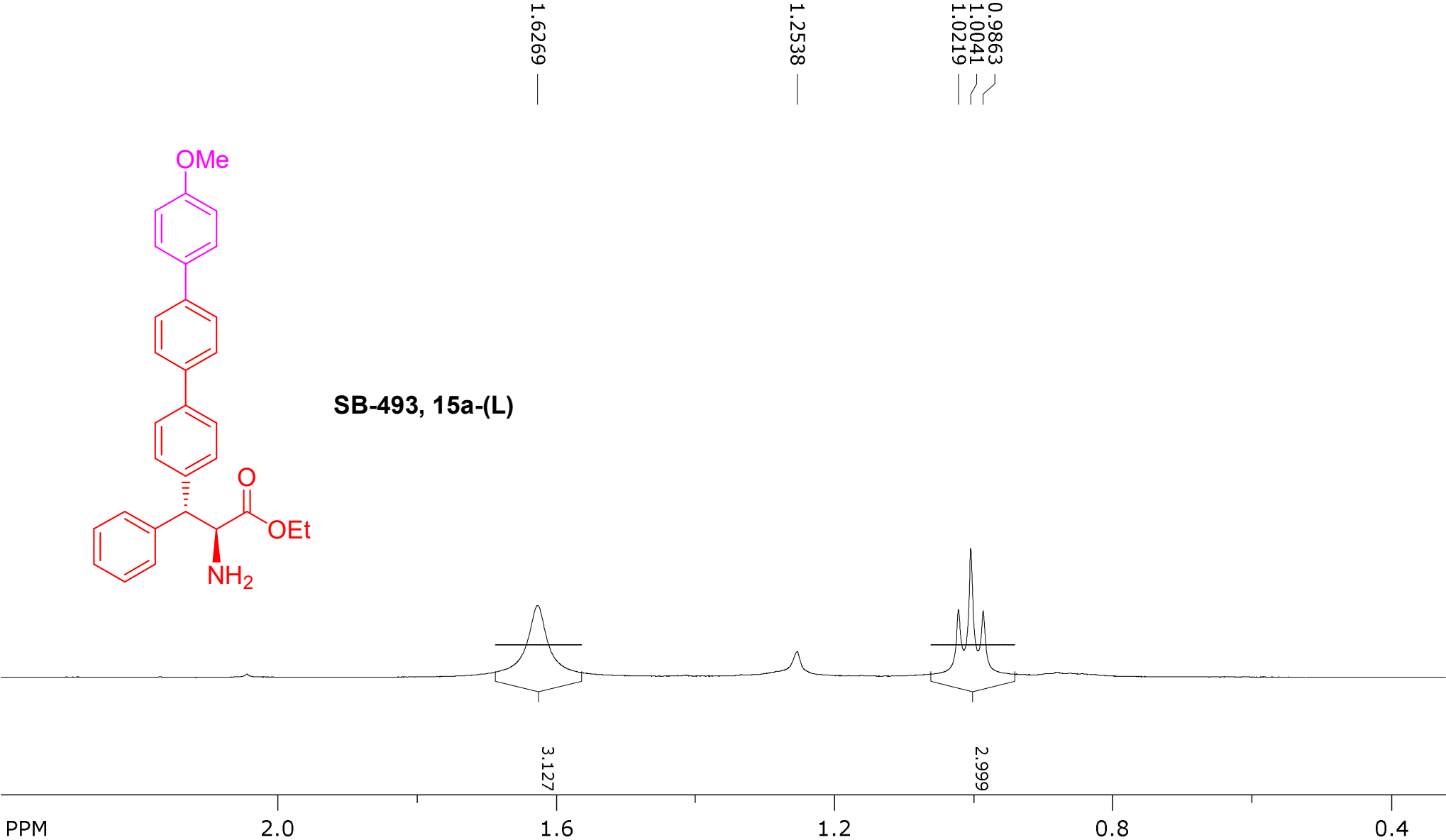
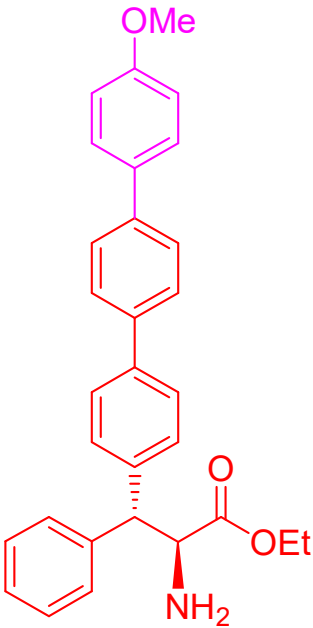


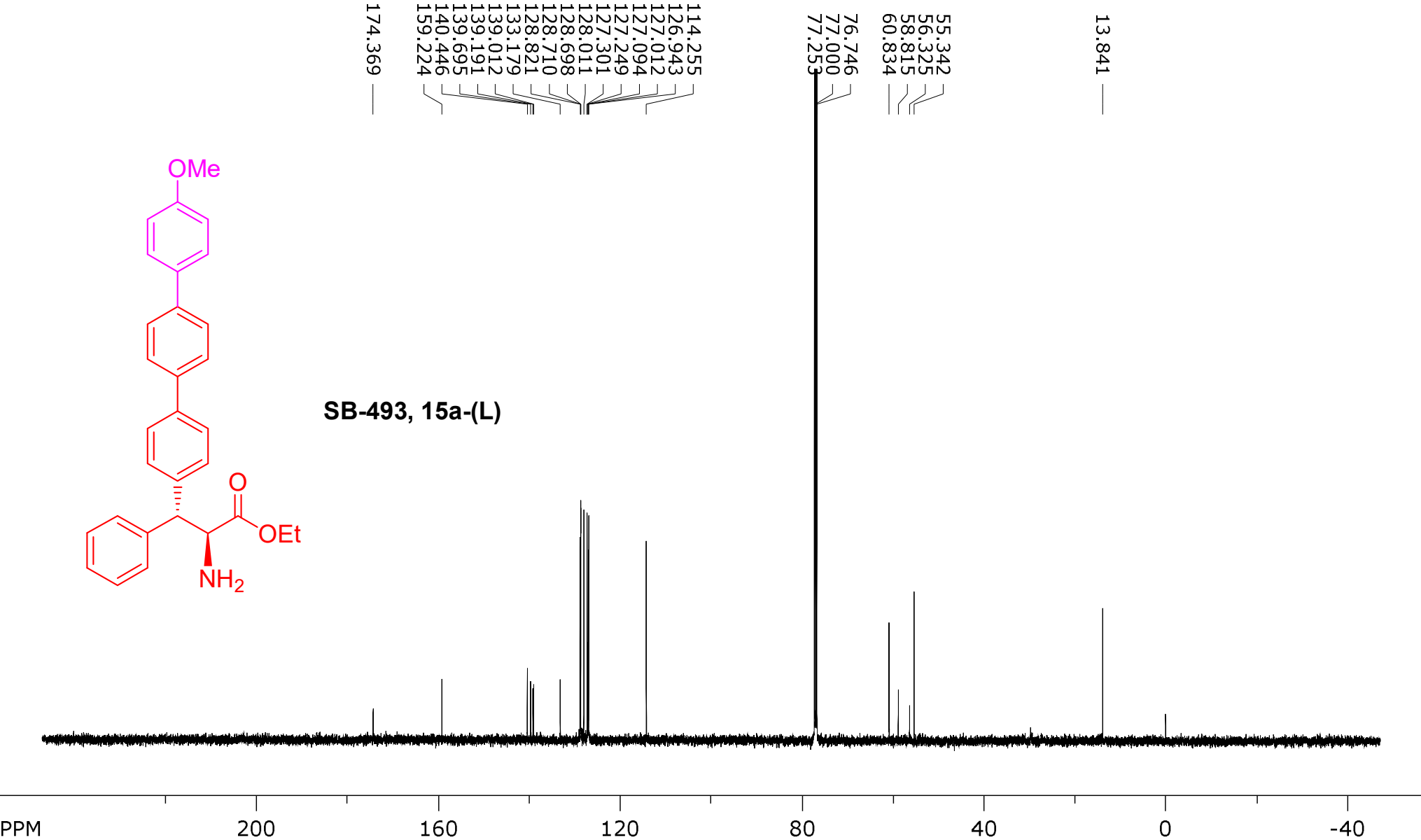


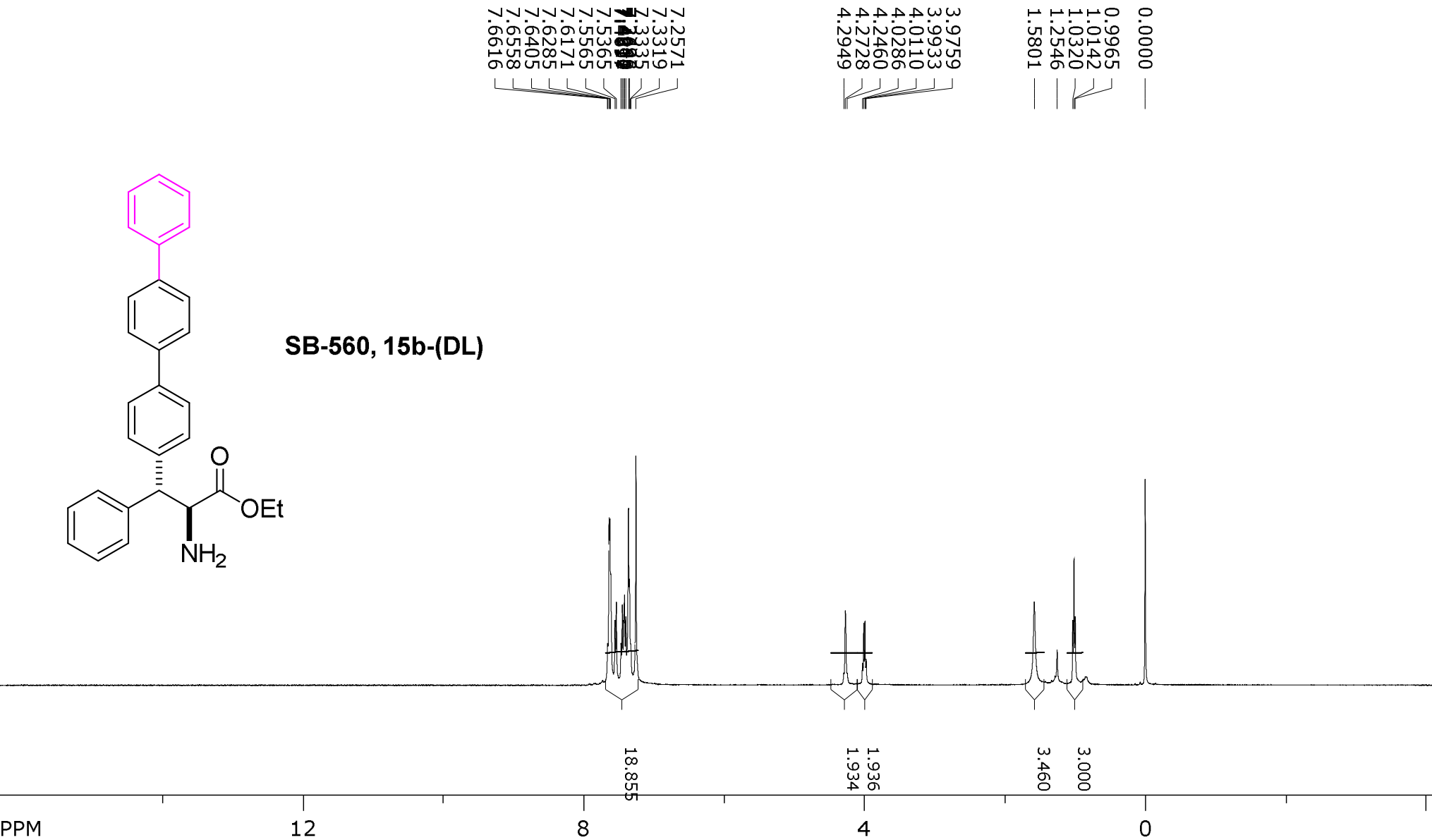


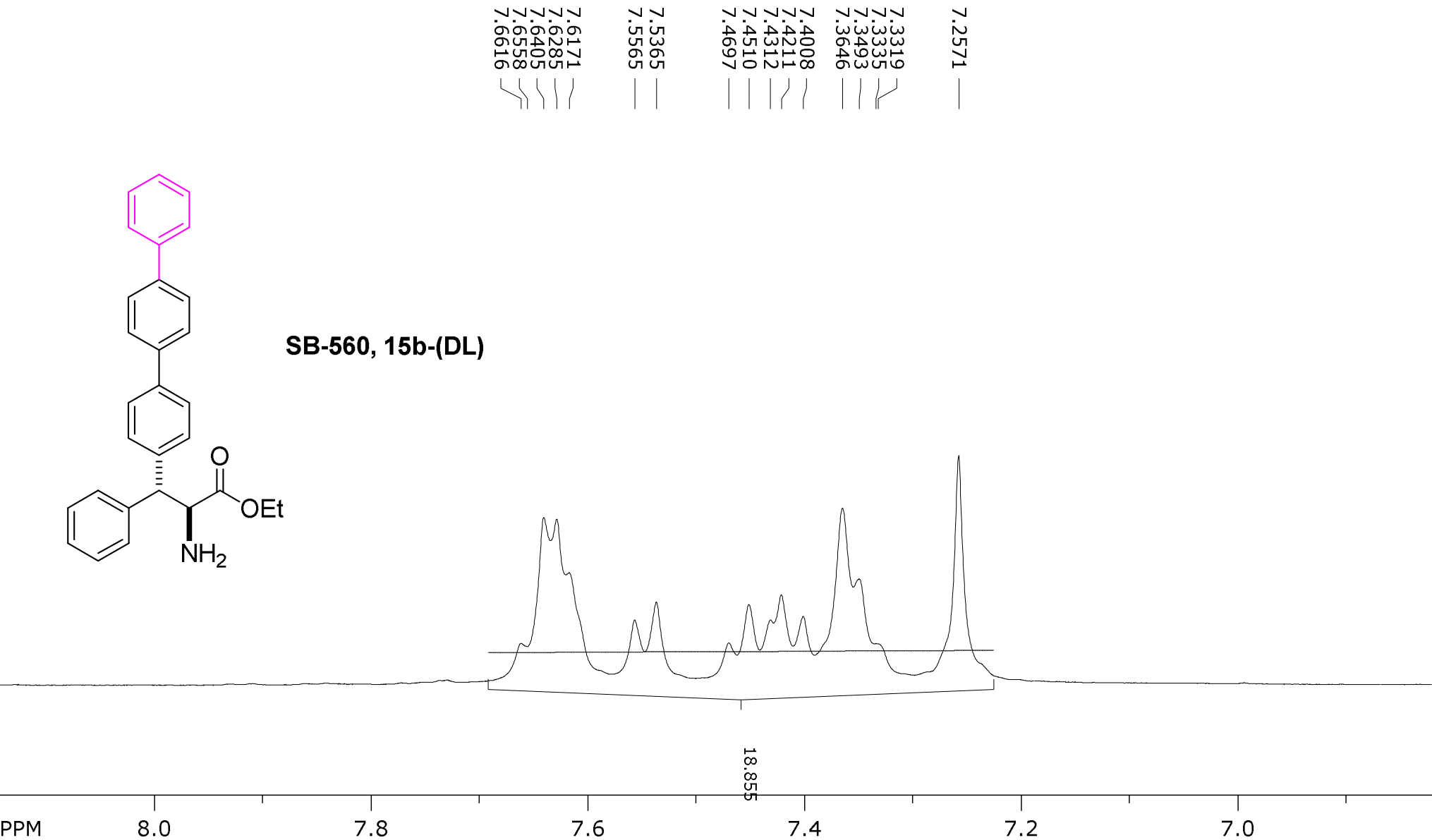


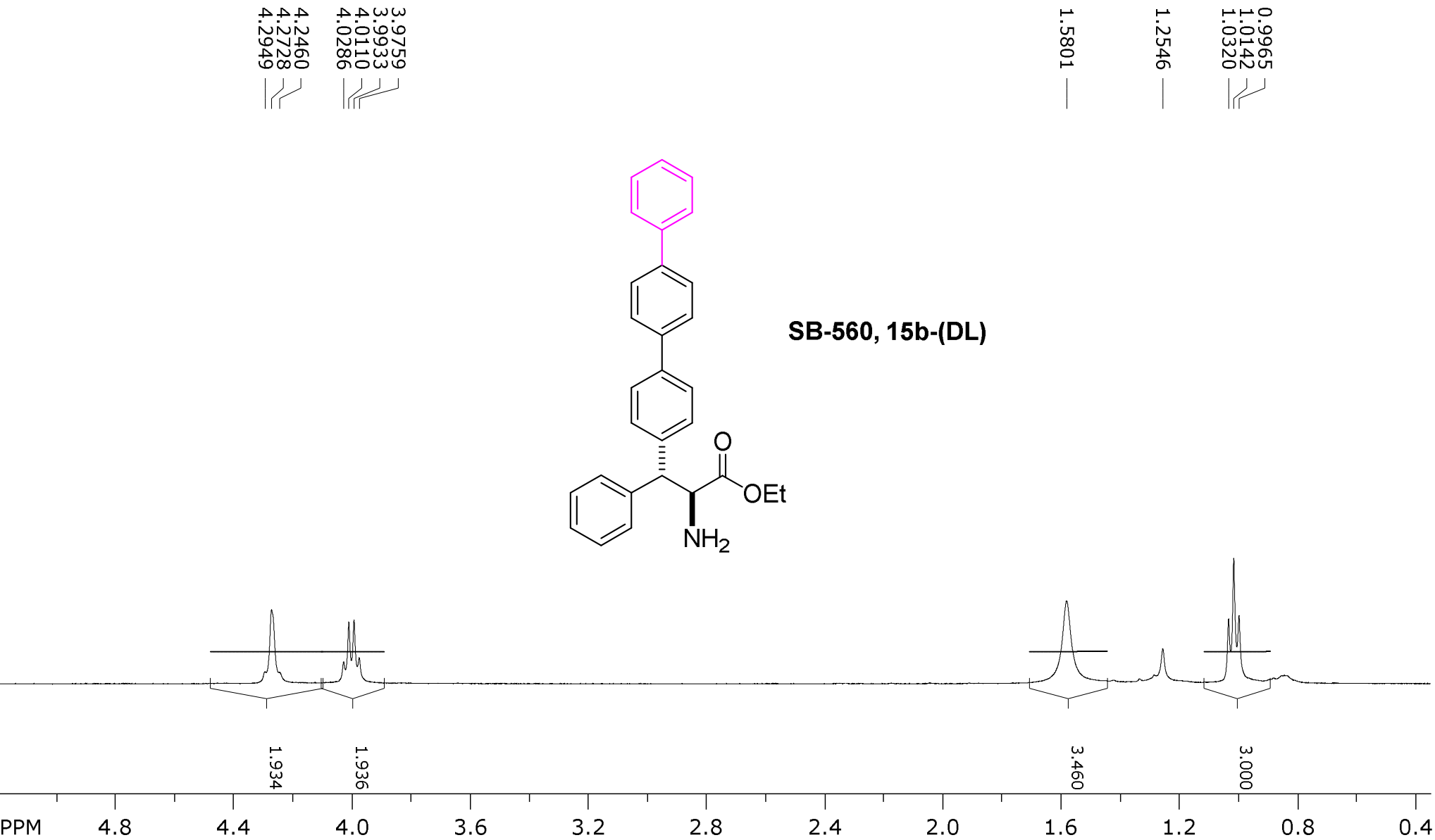
SB-493, 15a-(L)

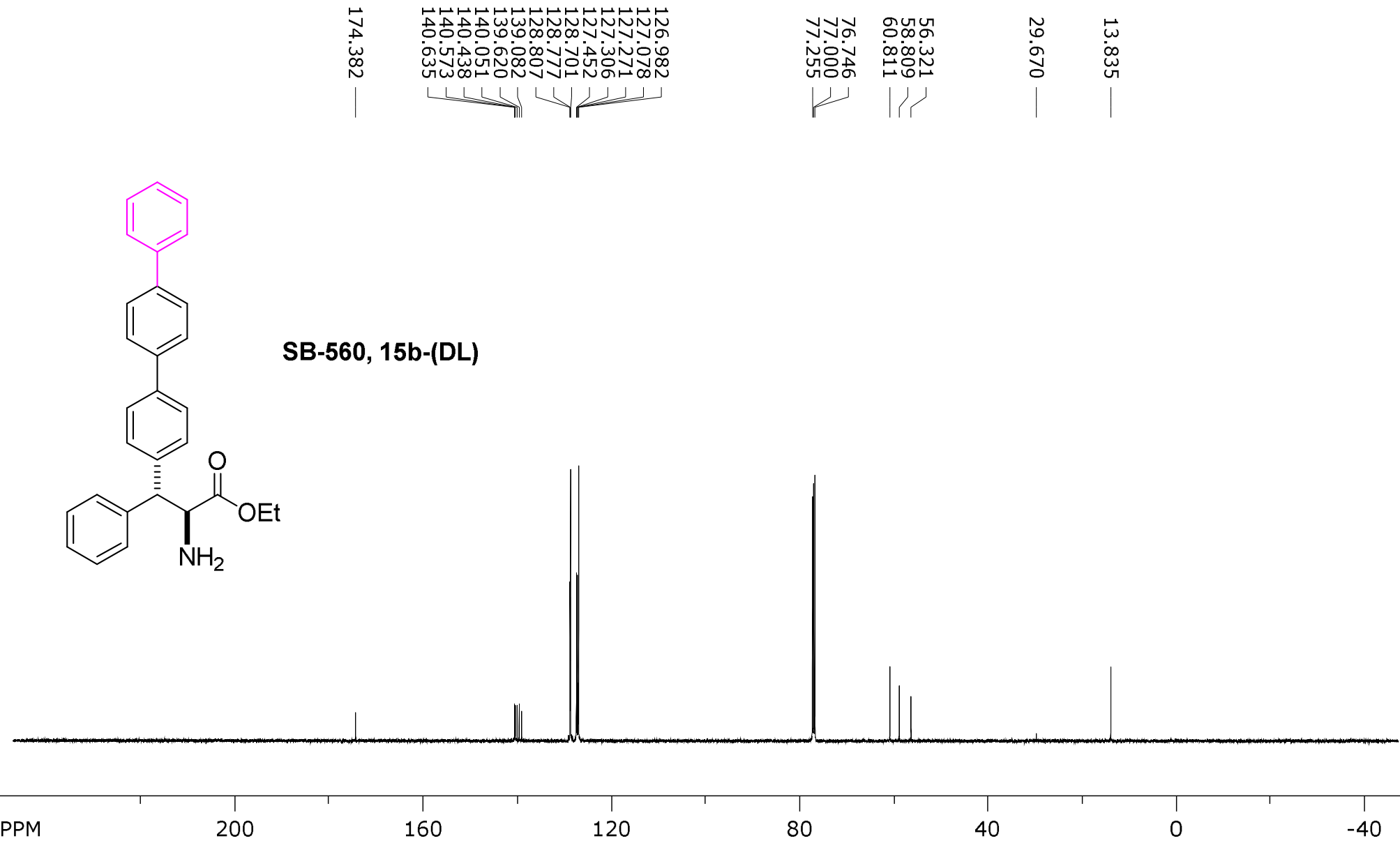


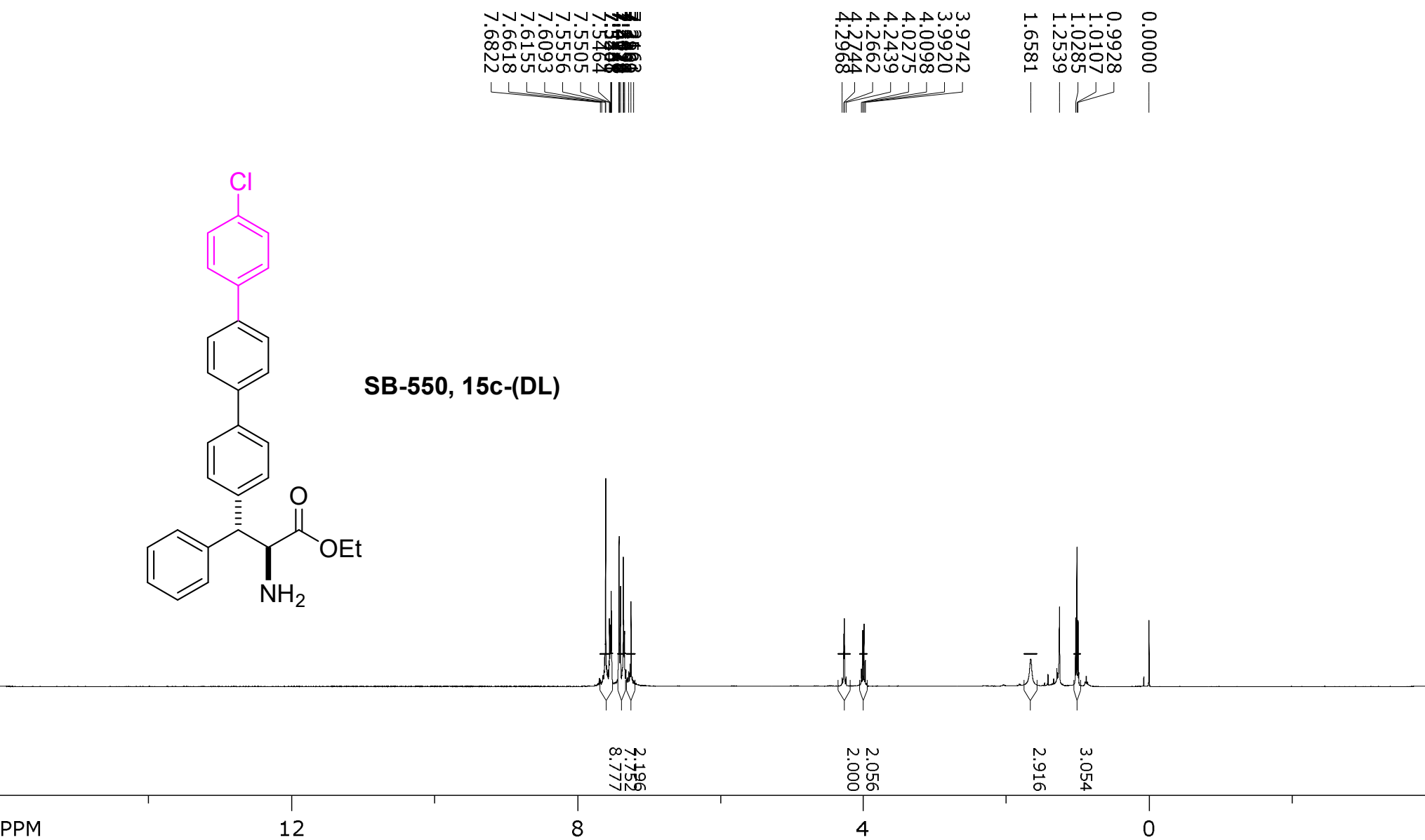


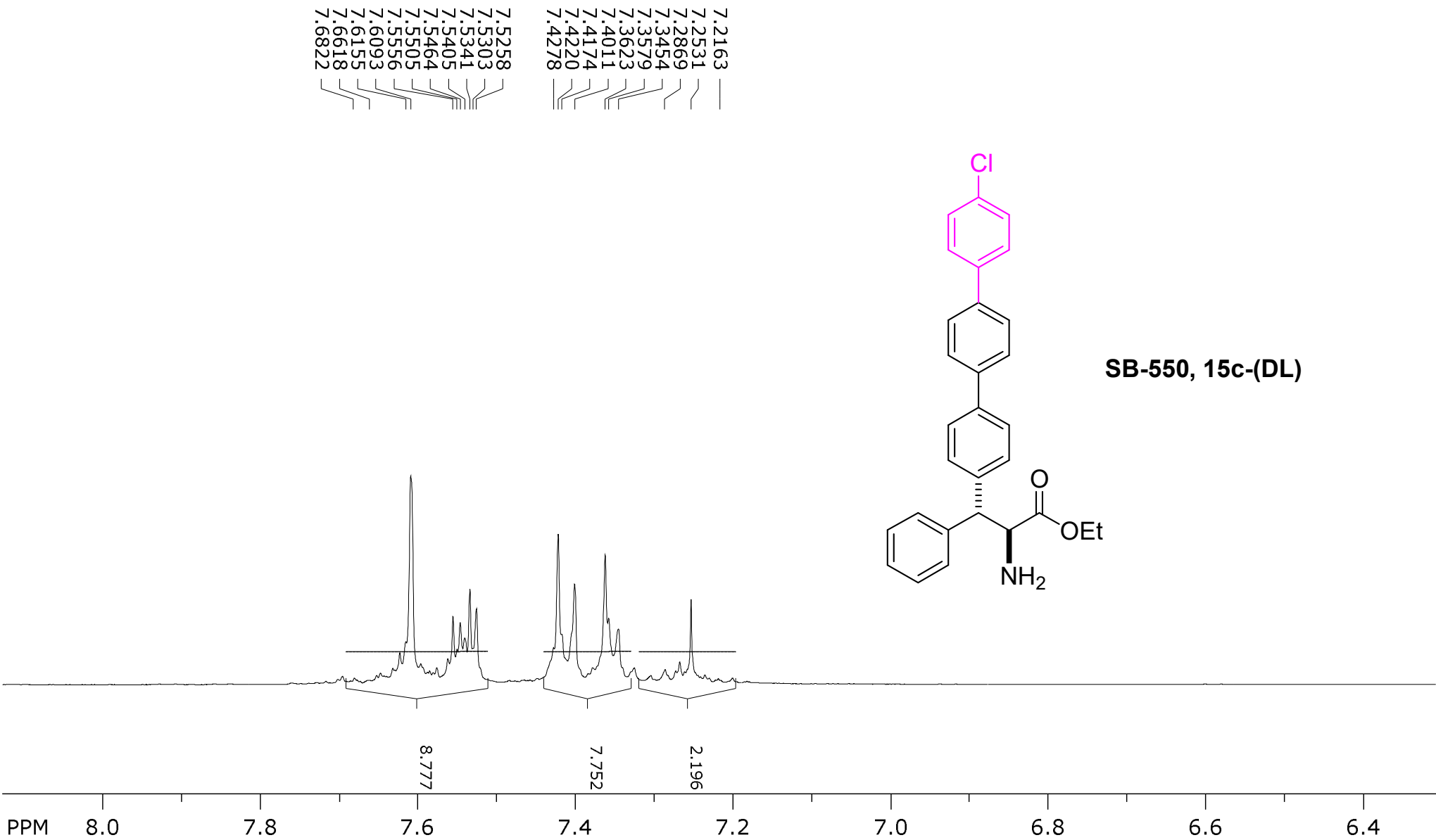


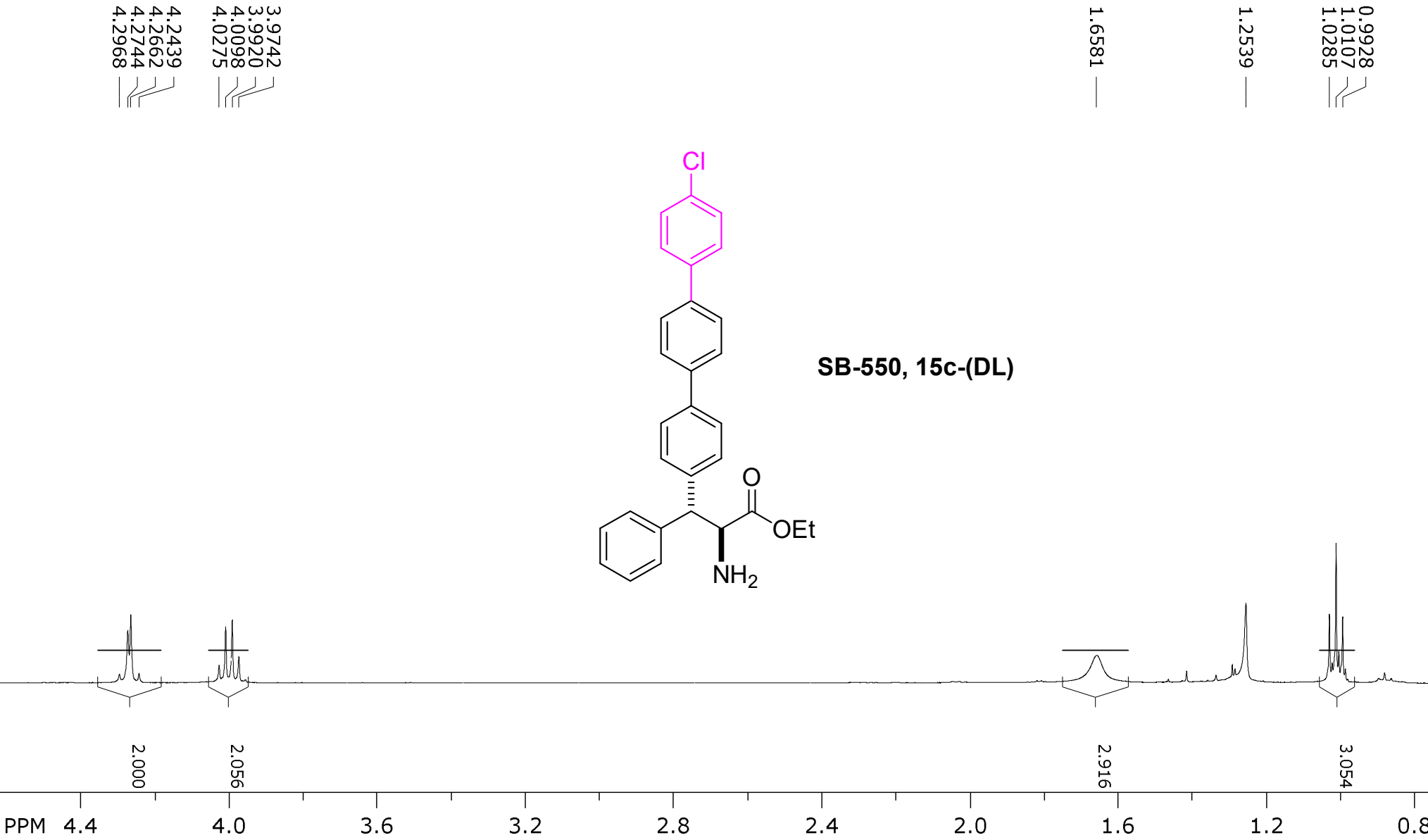


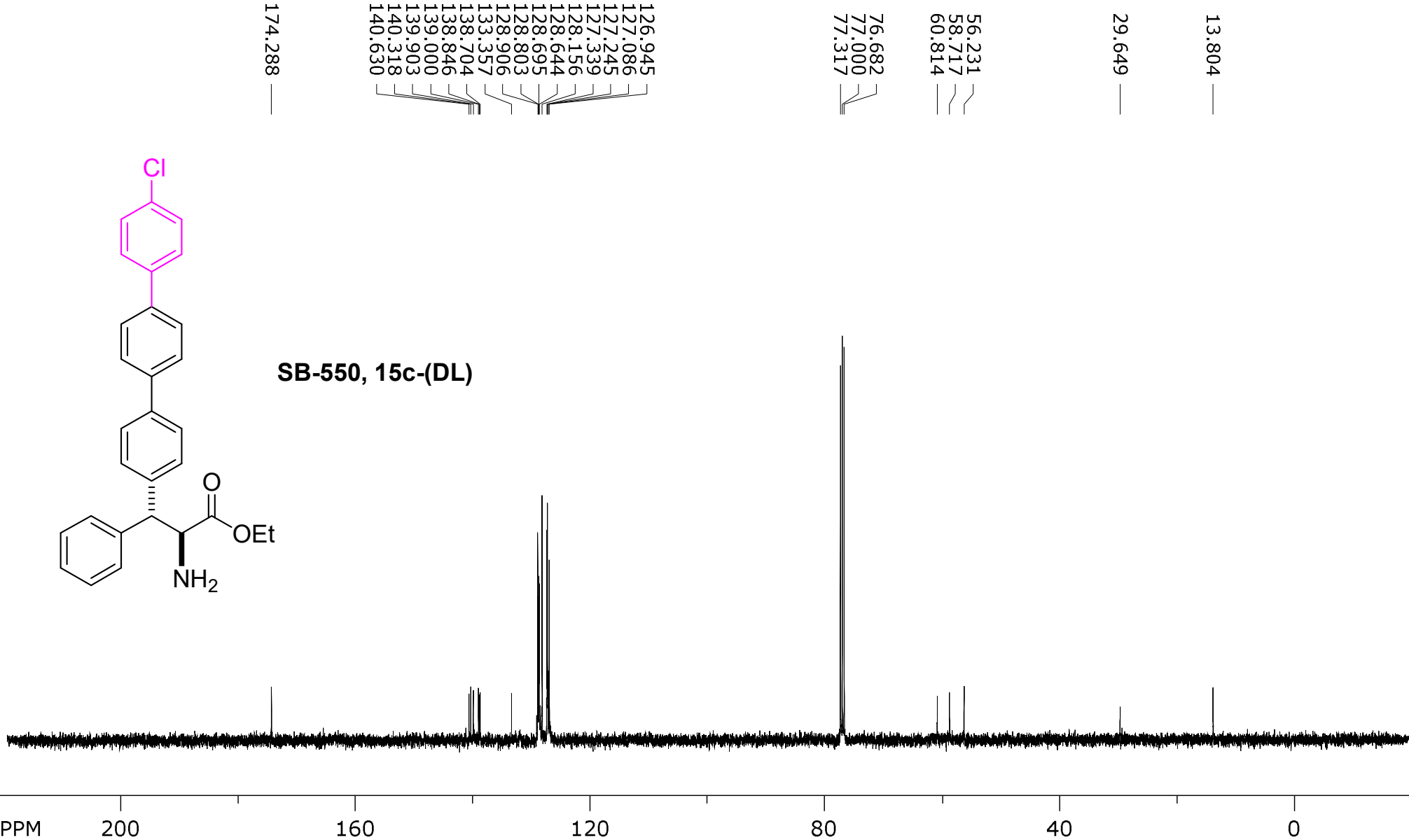


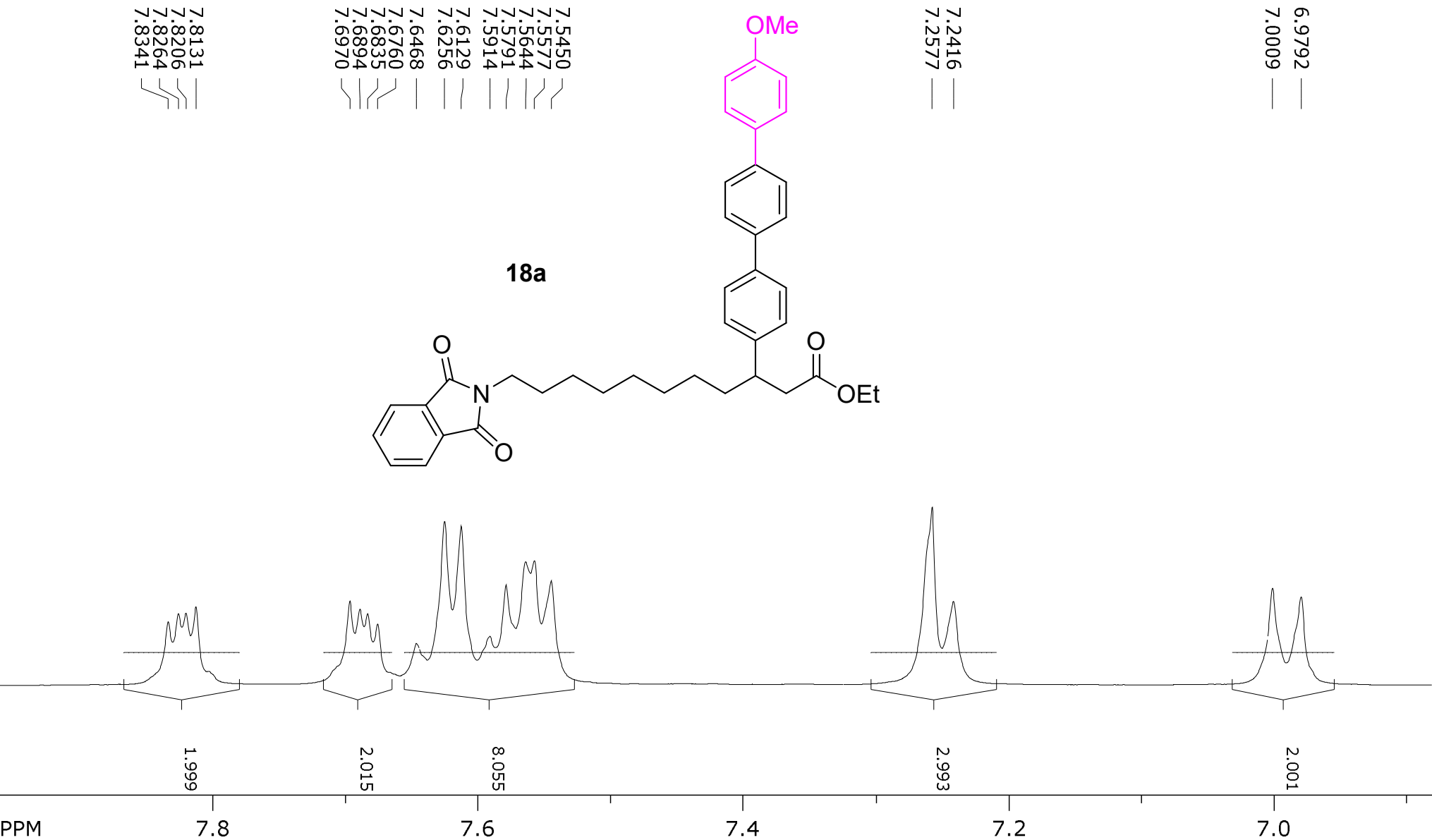


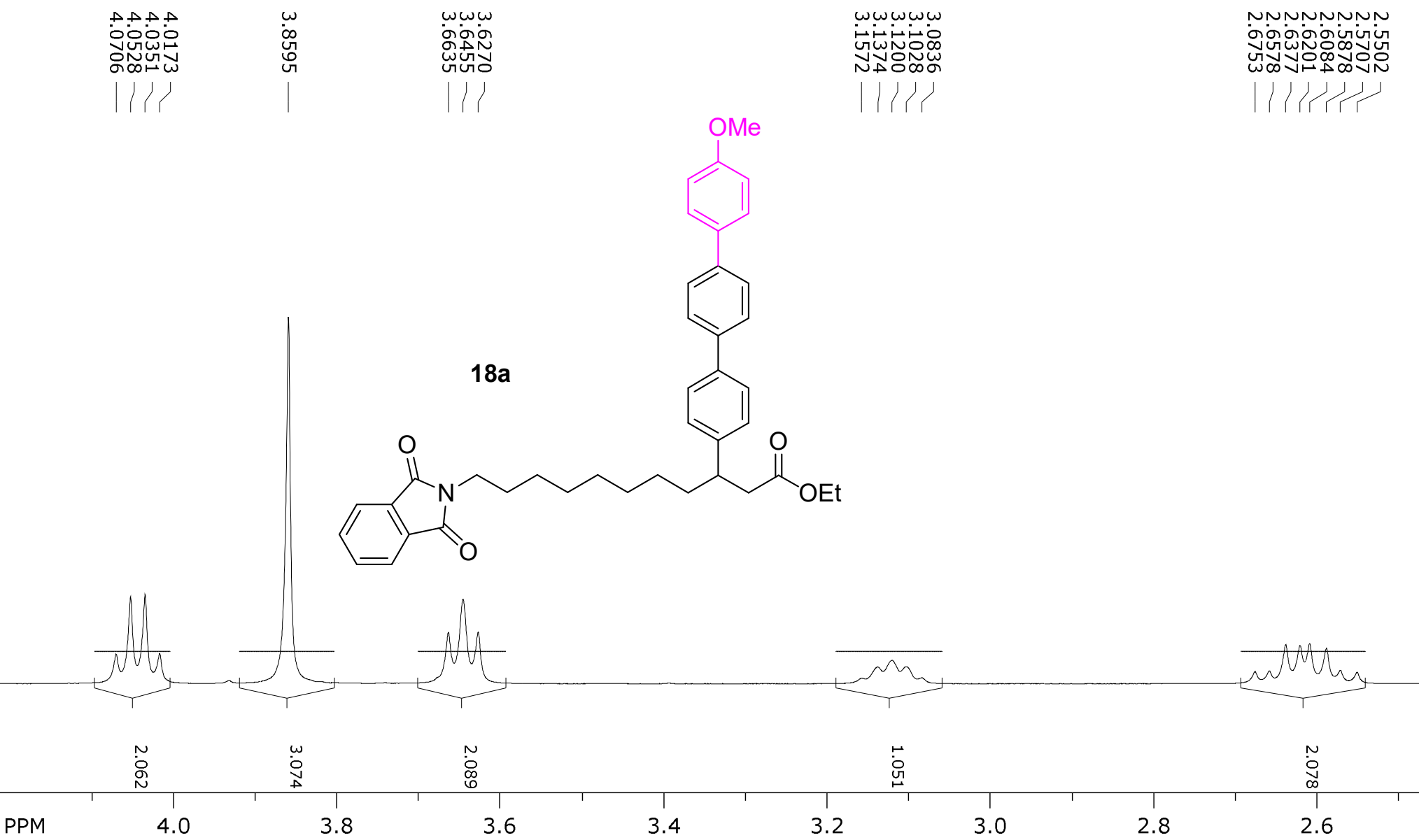


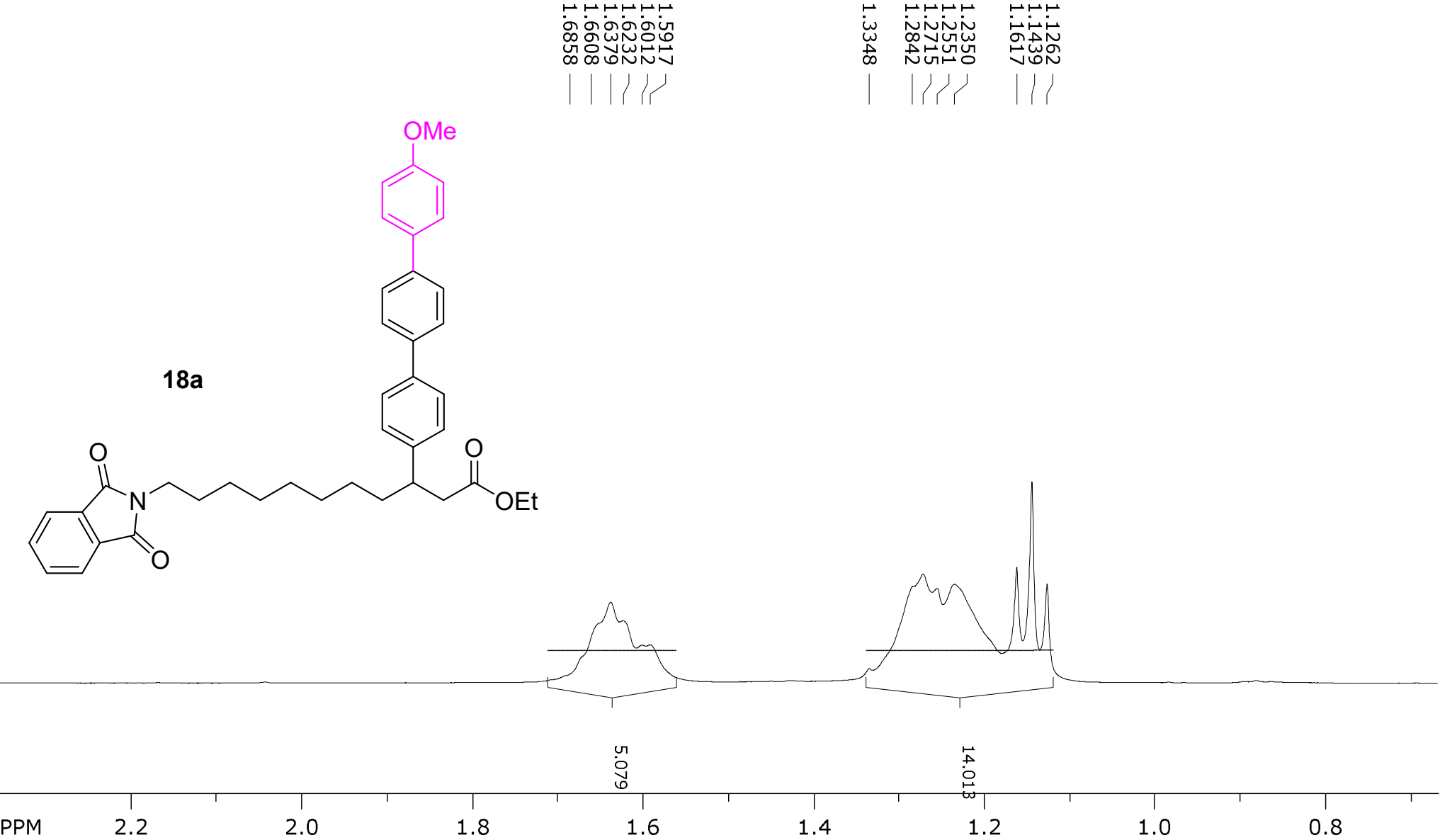


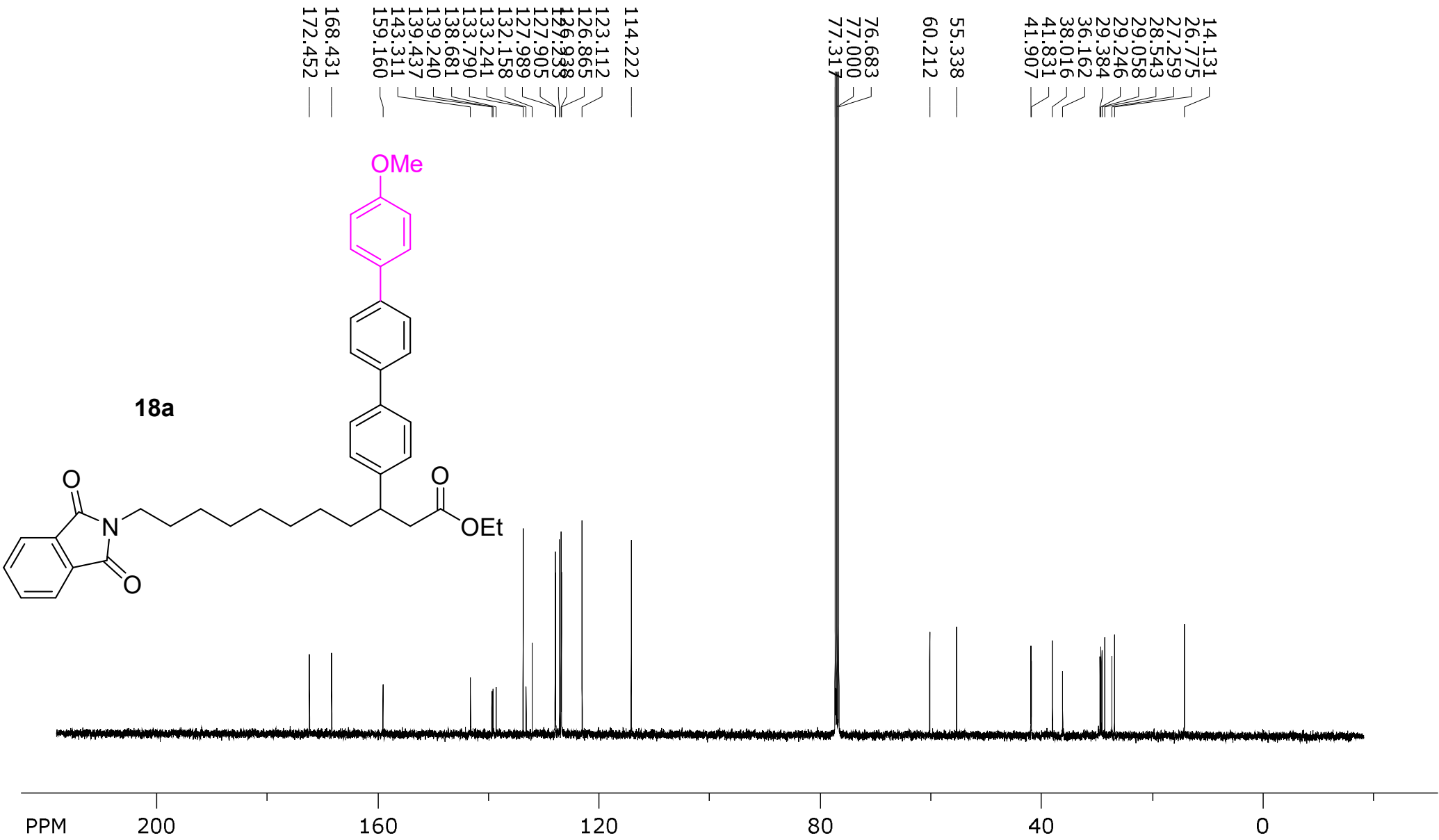


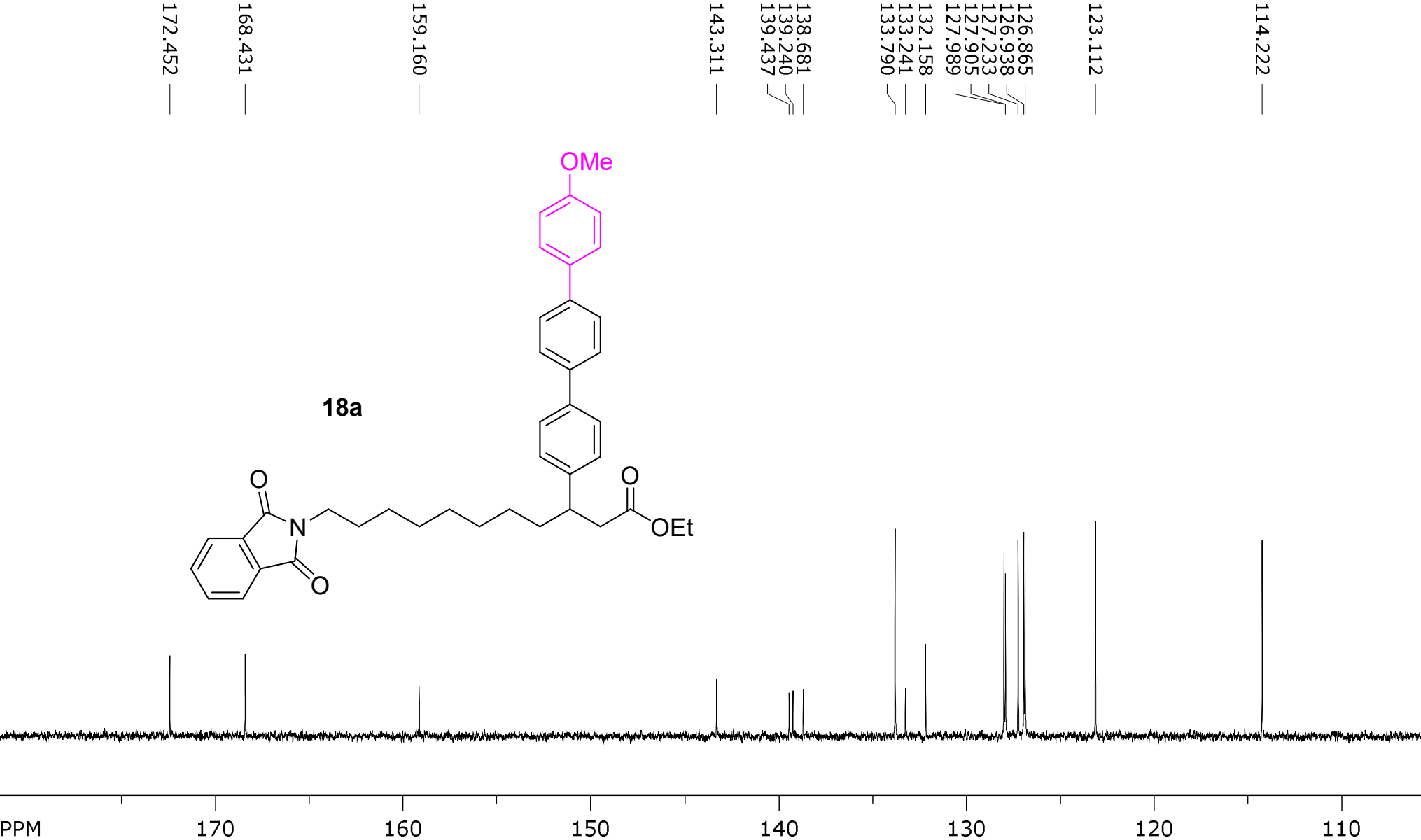


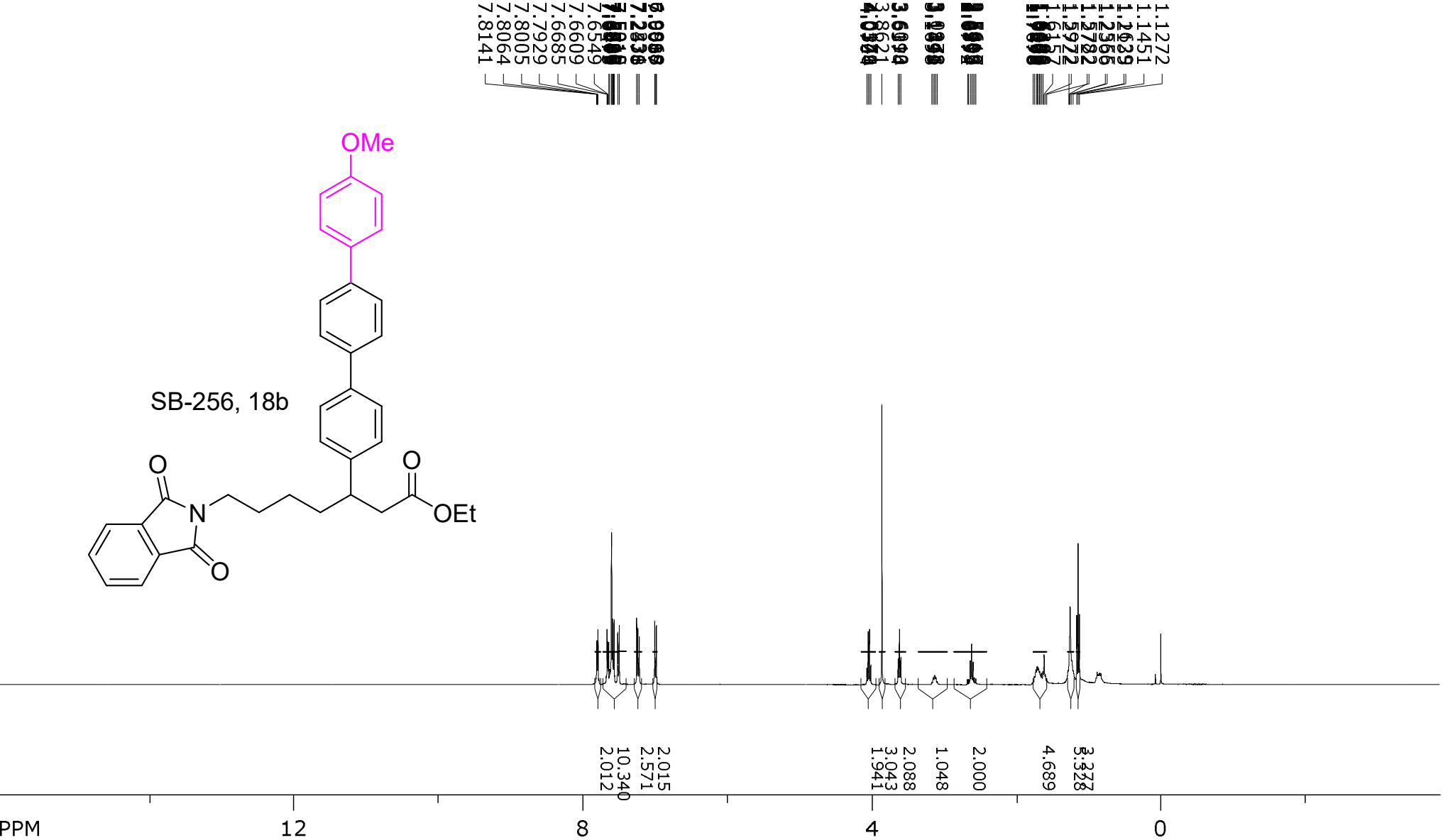


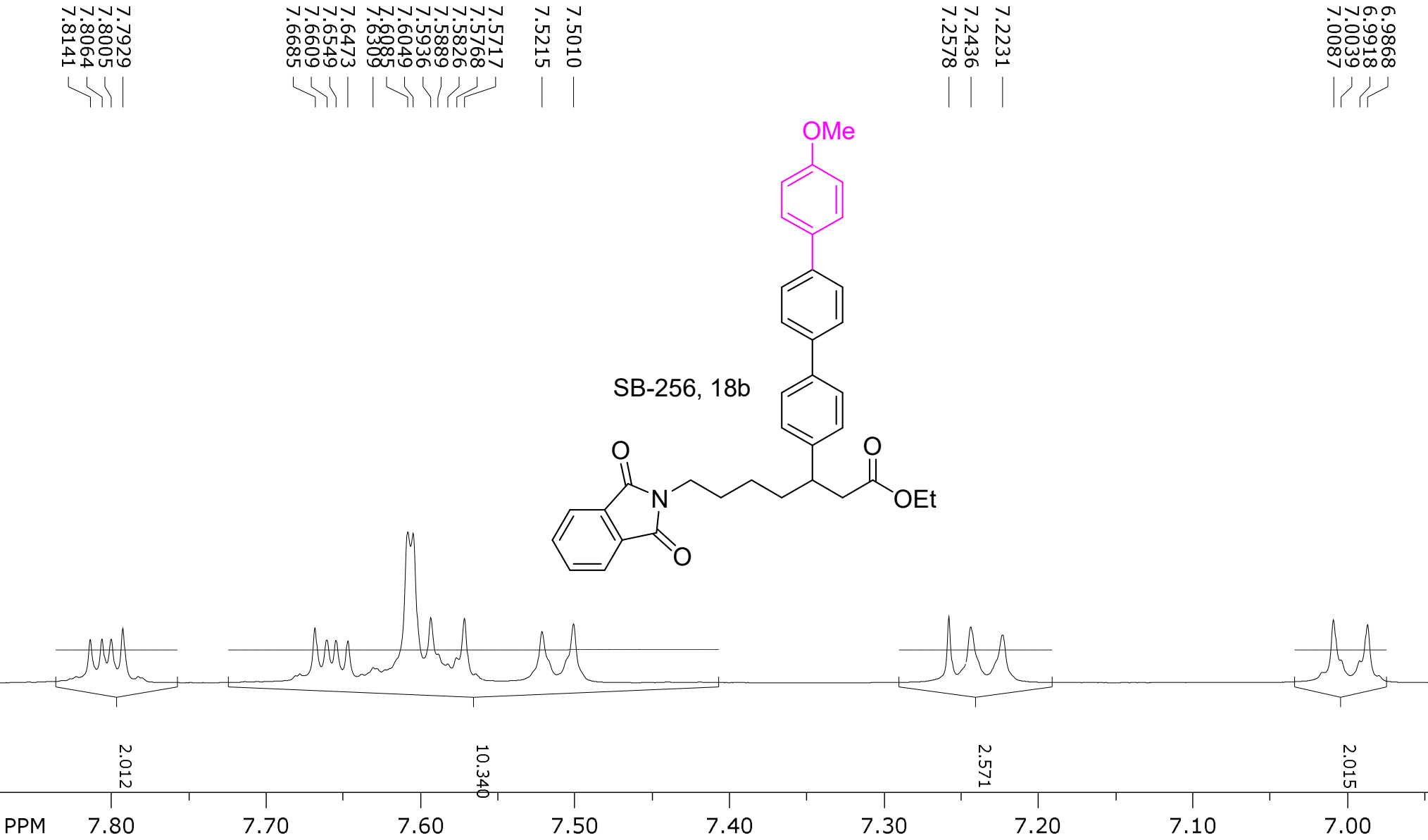


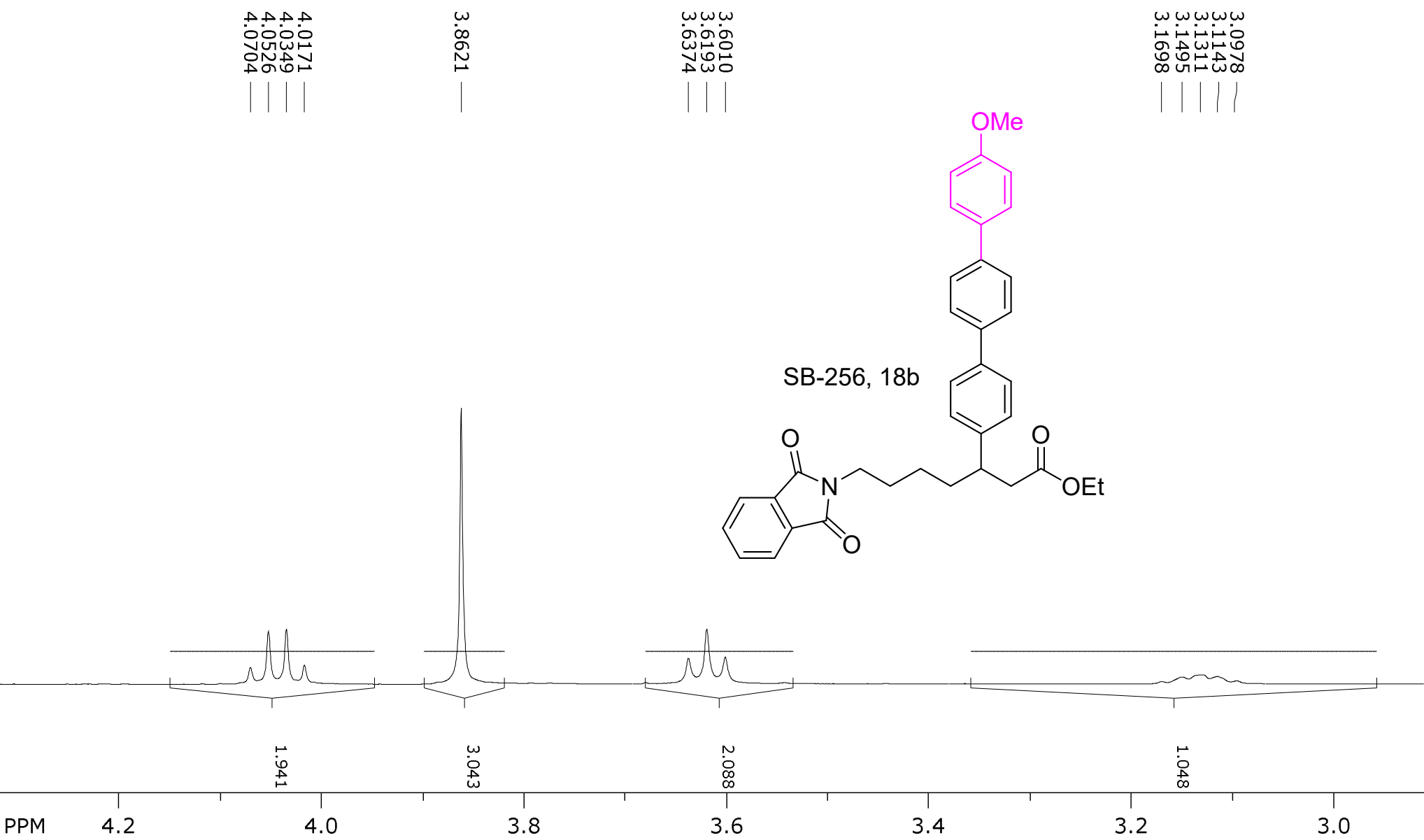


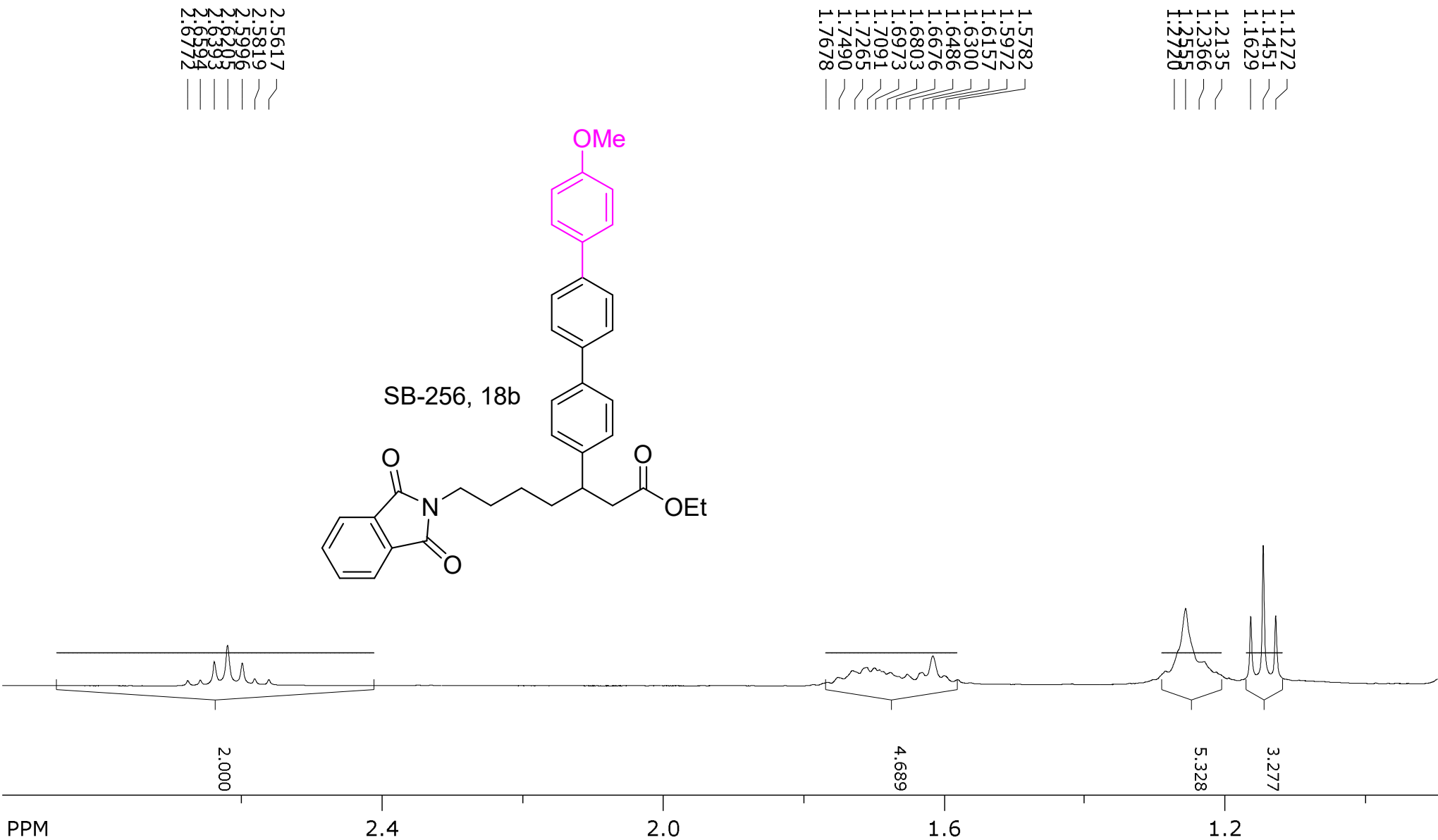


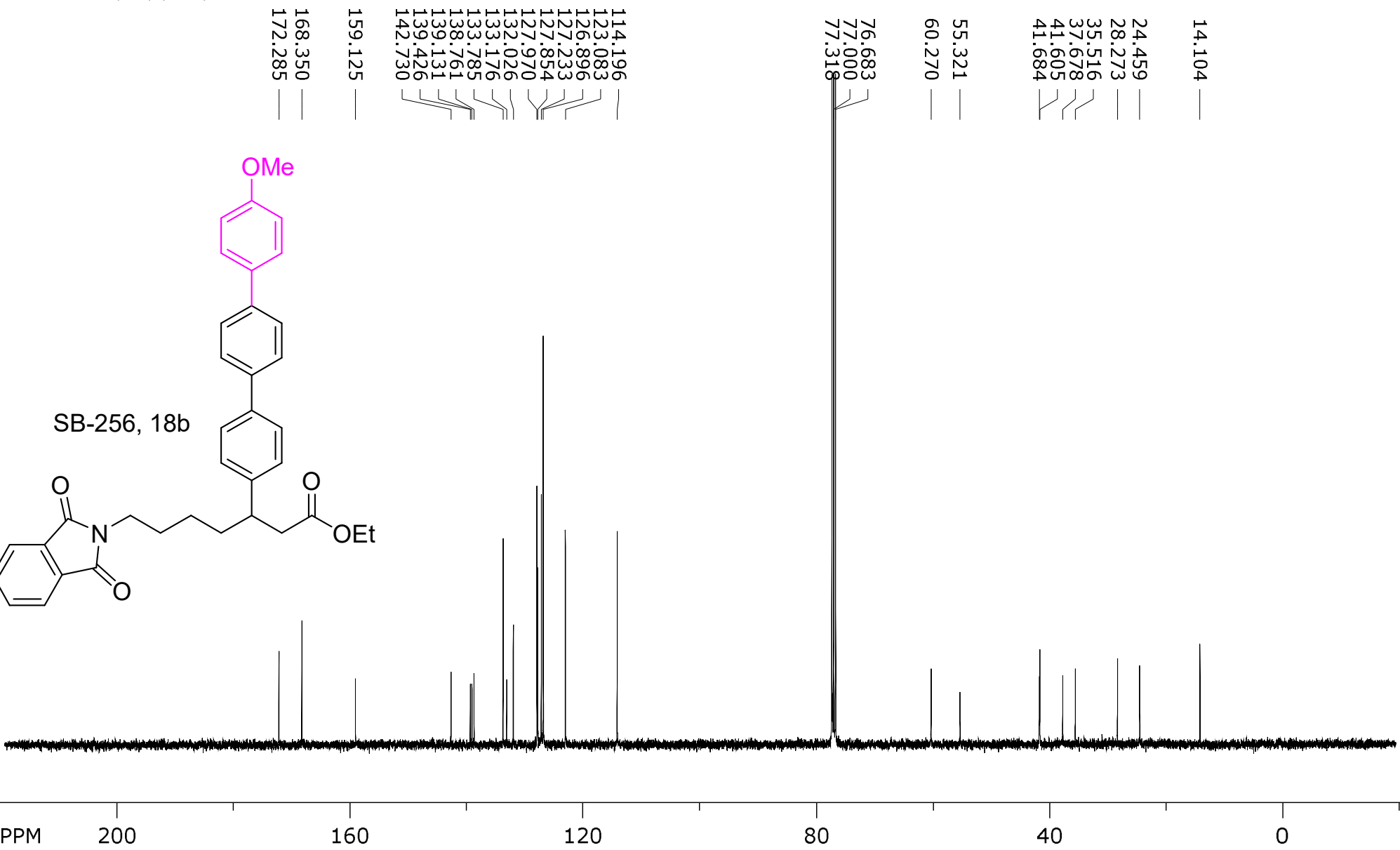


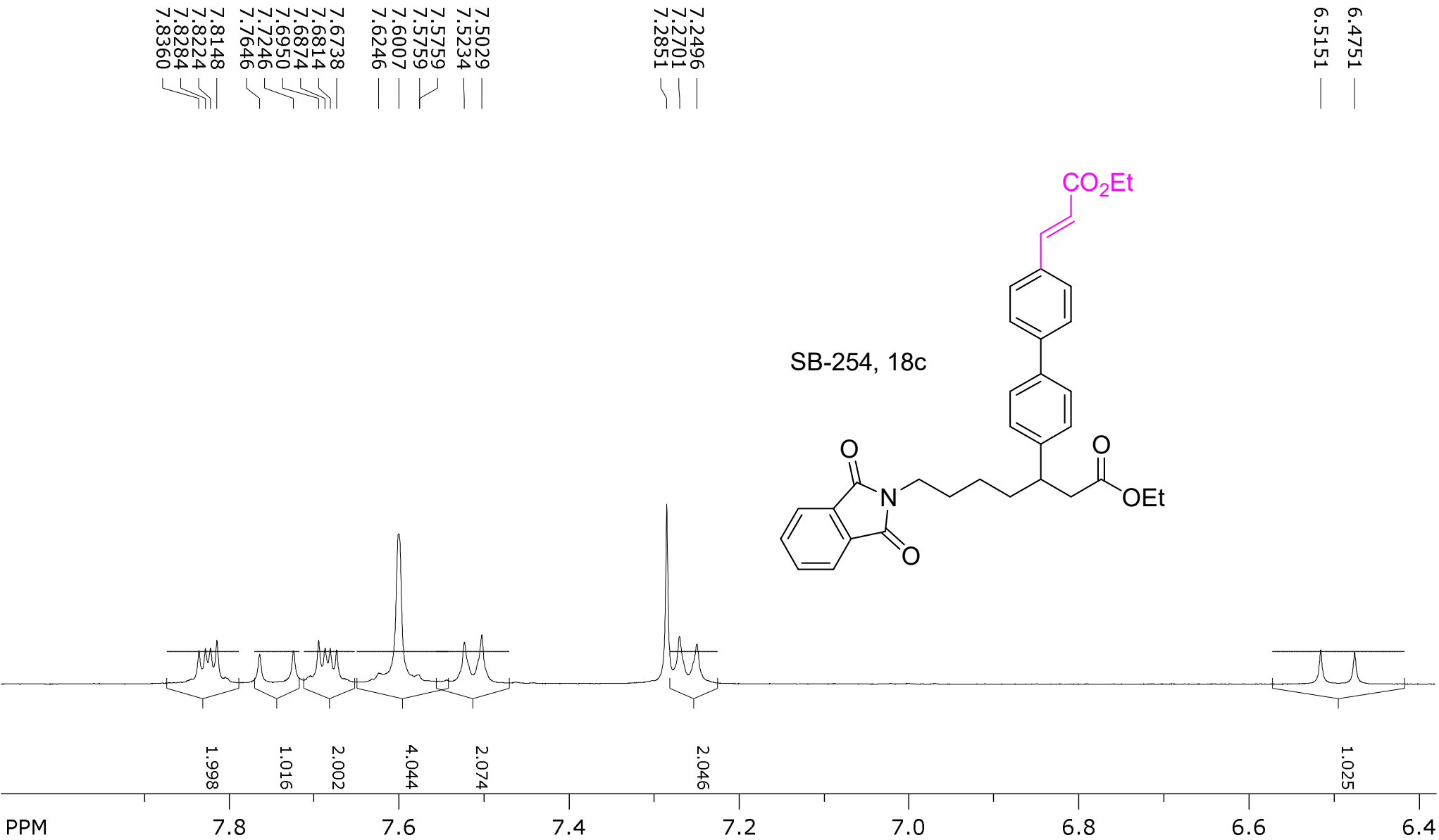


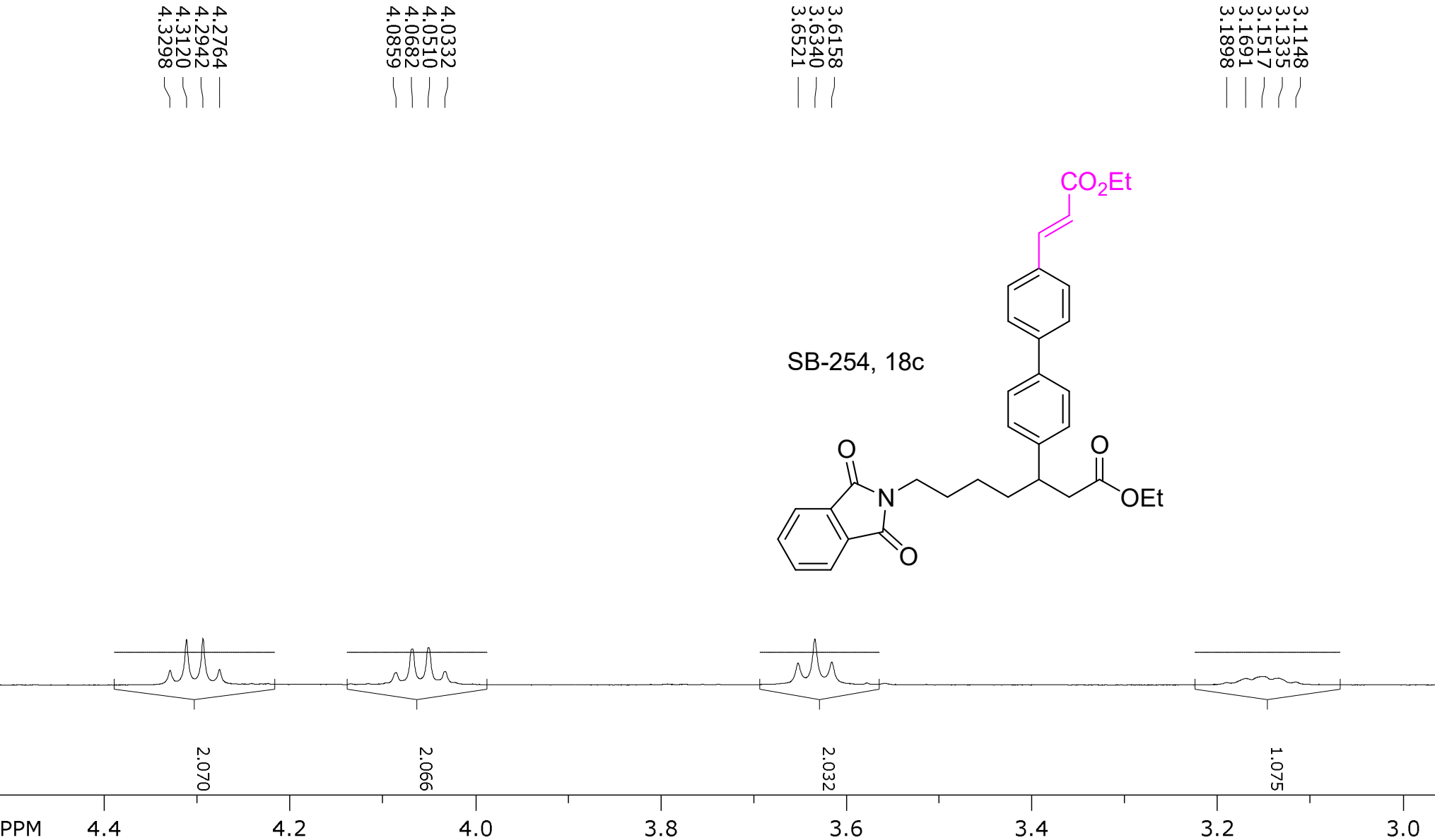


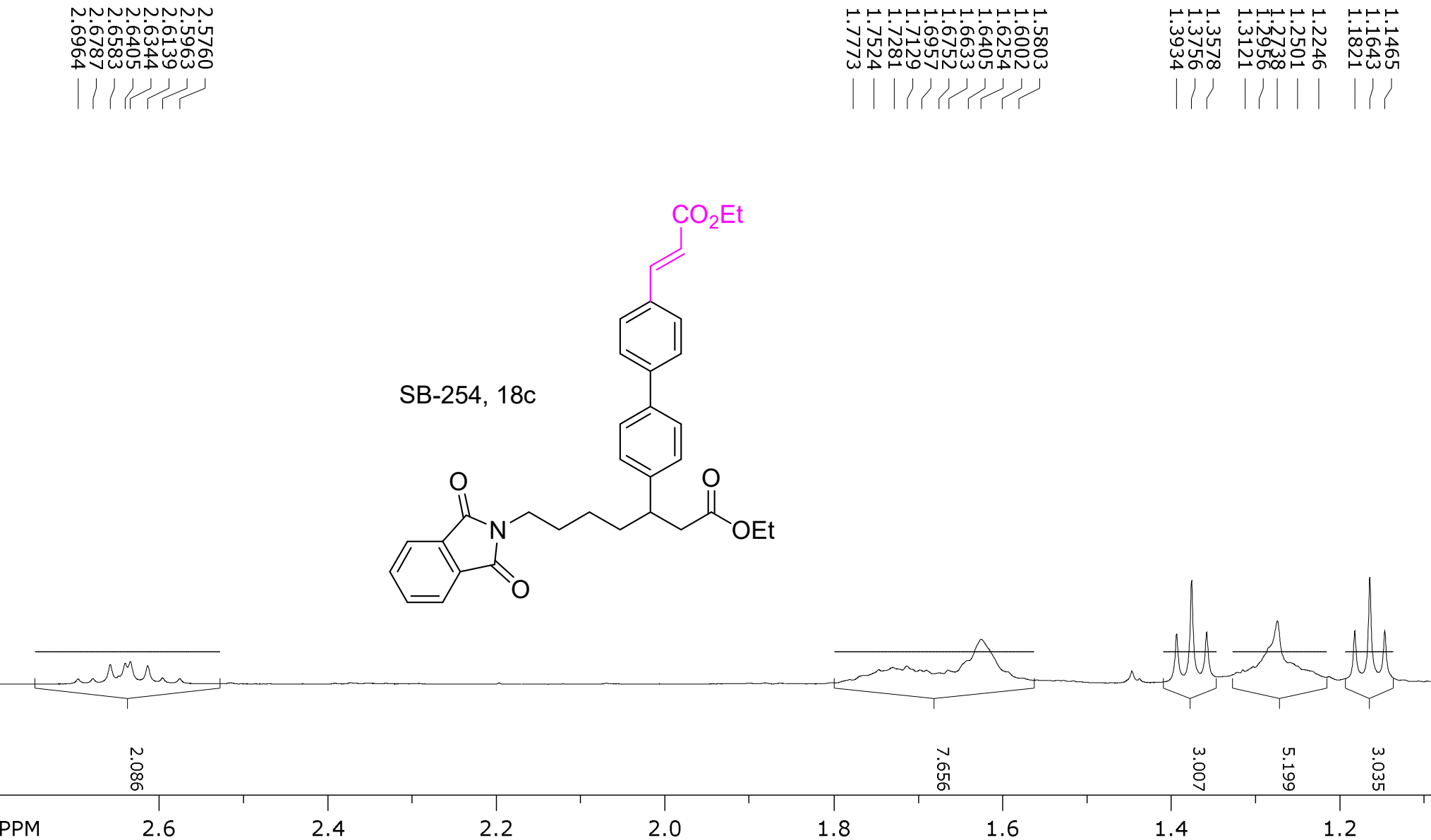


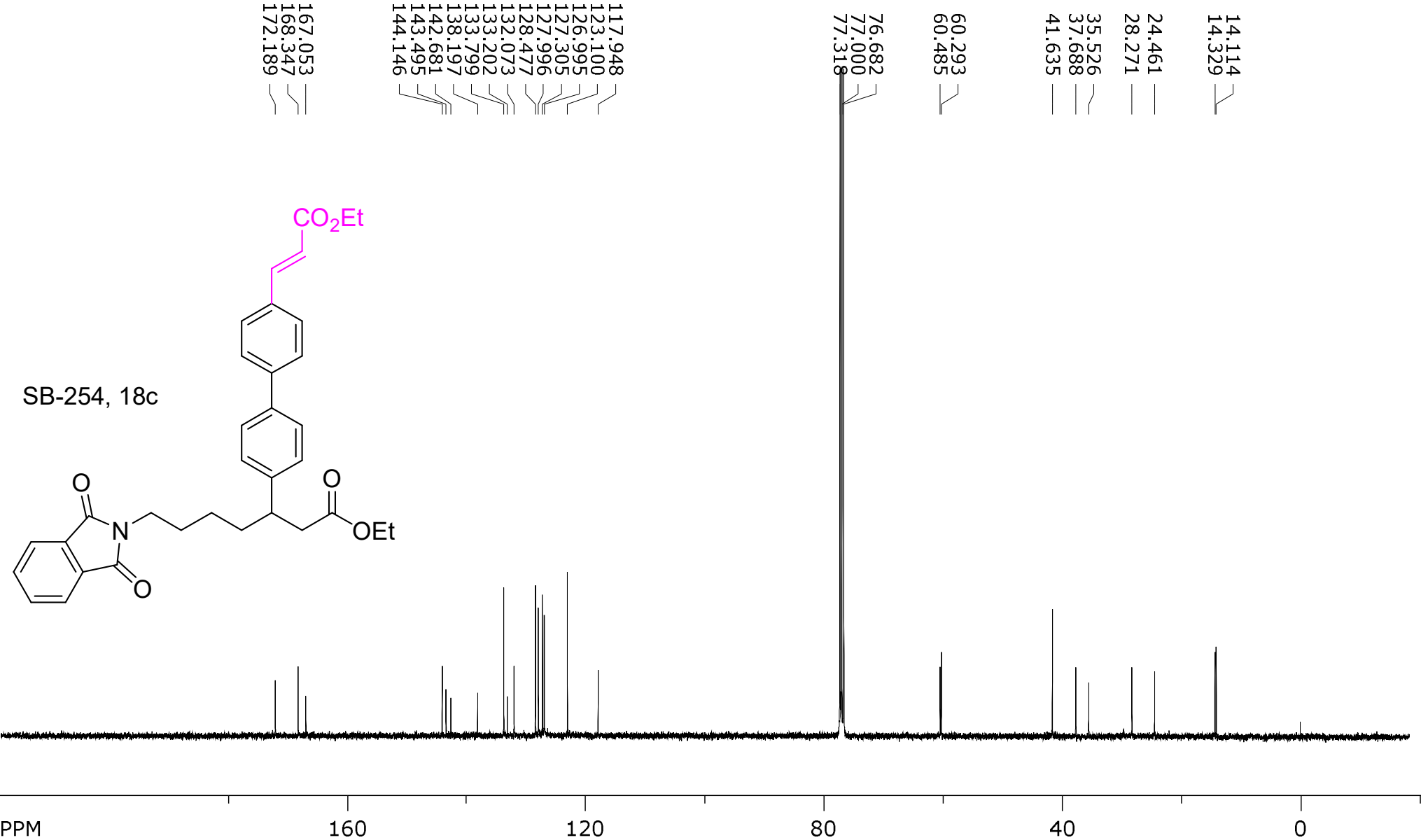


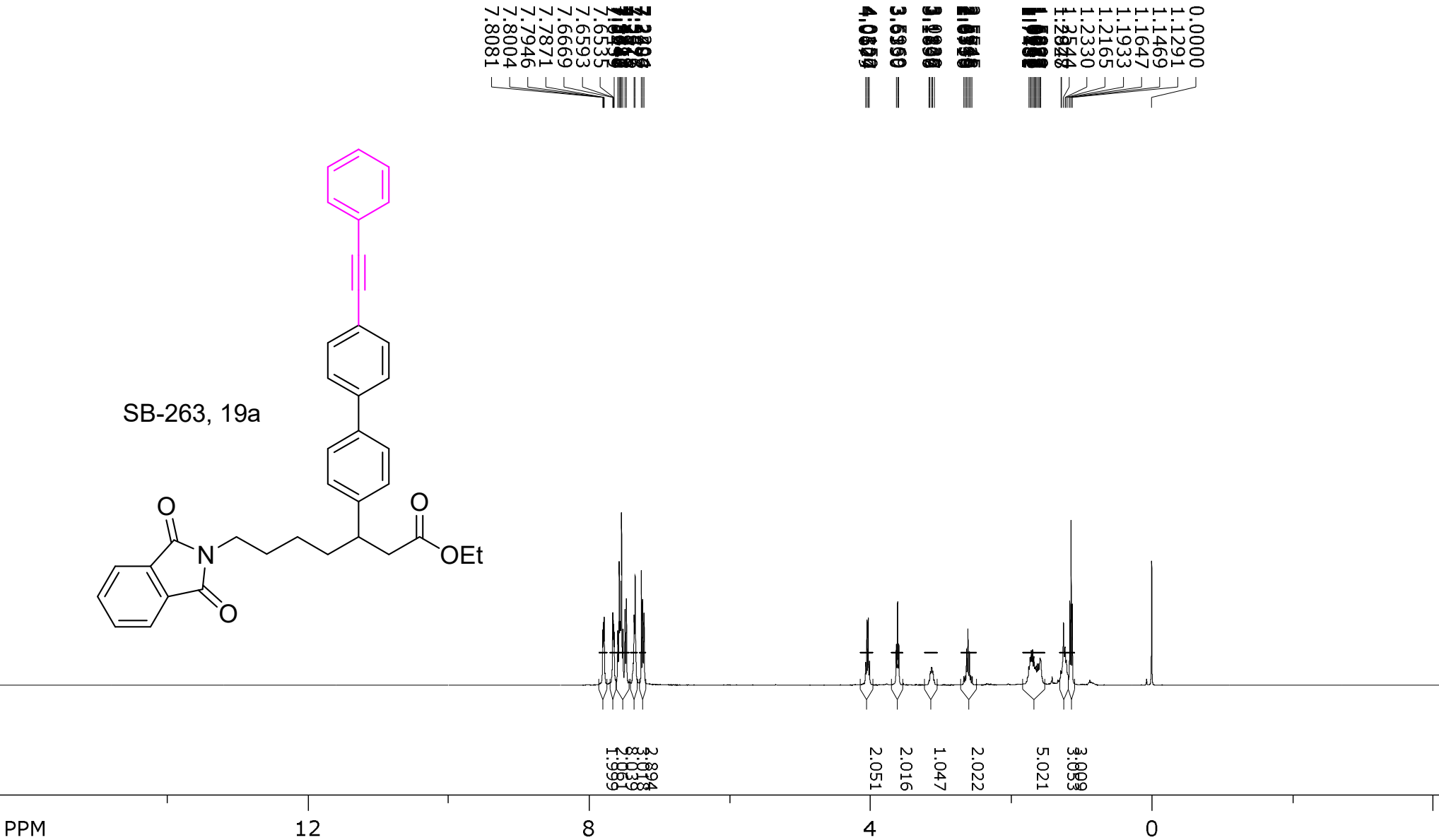


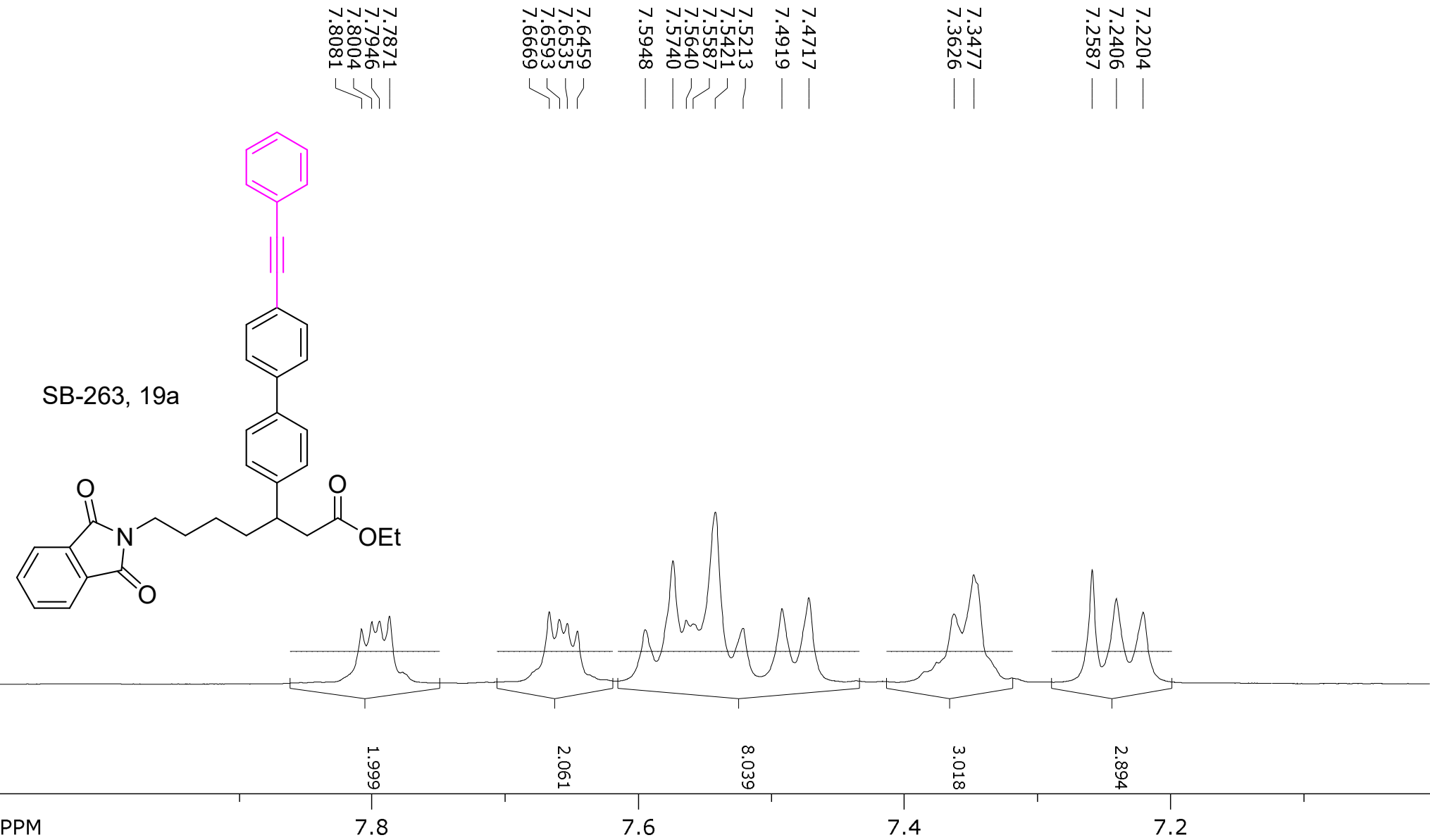


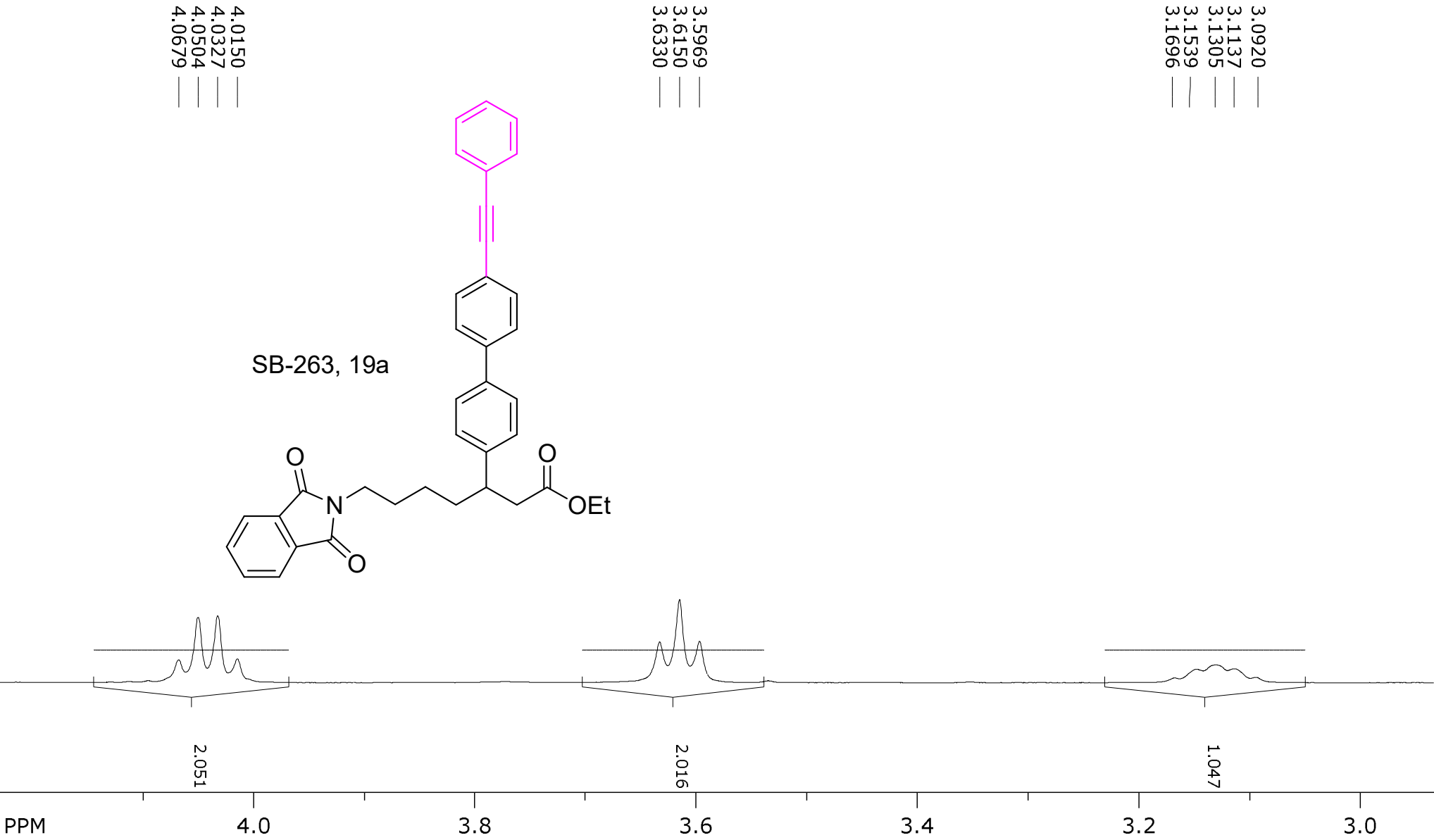


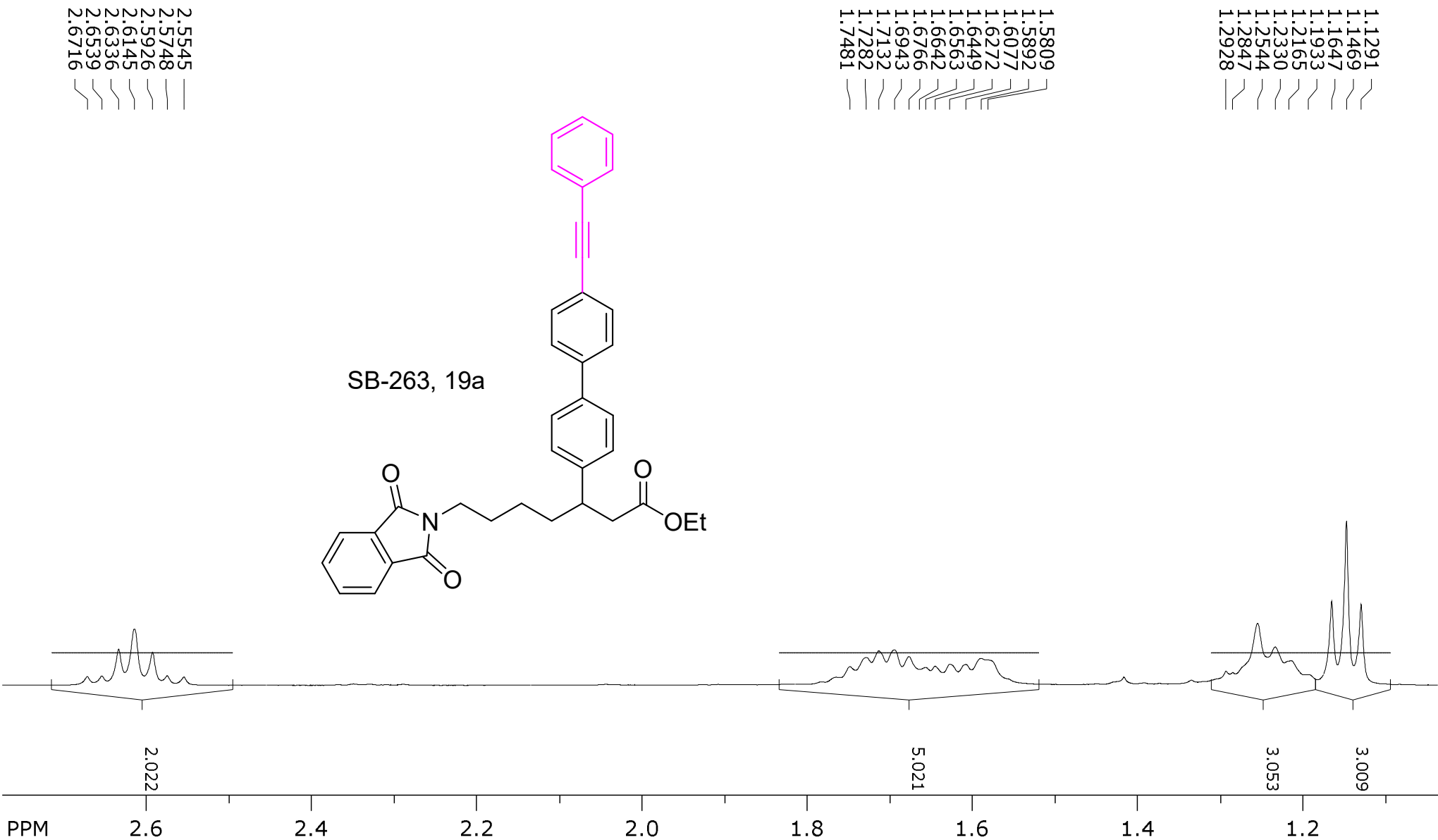


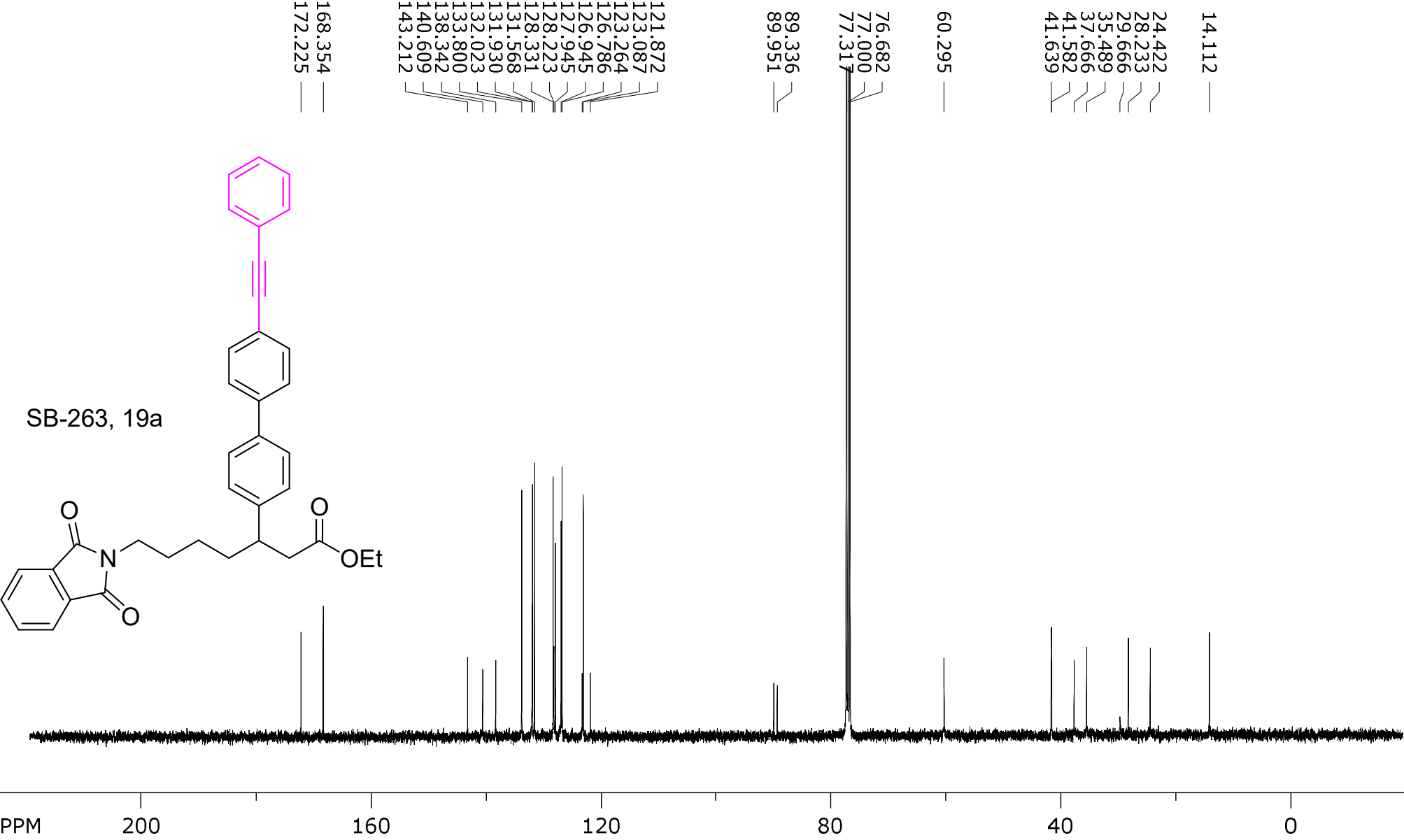
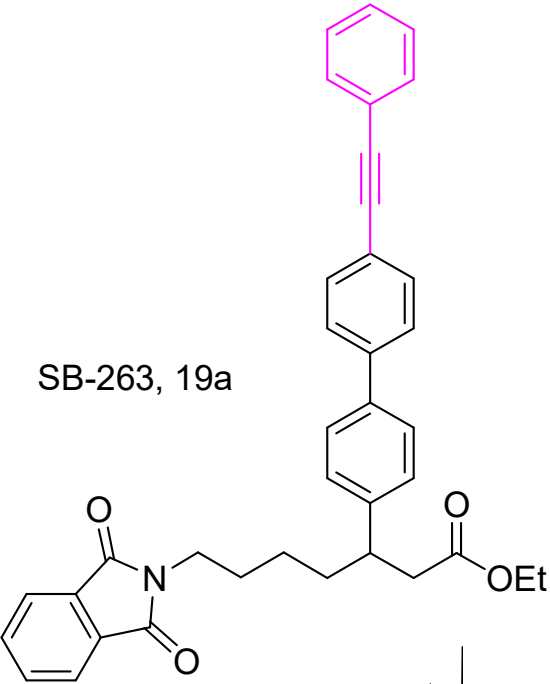


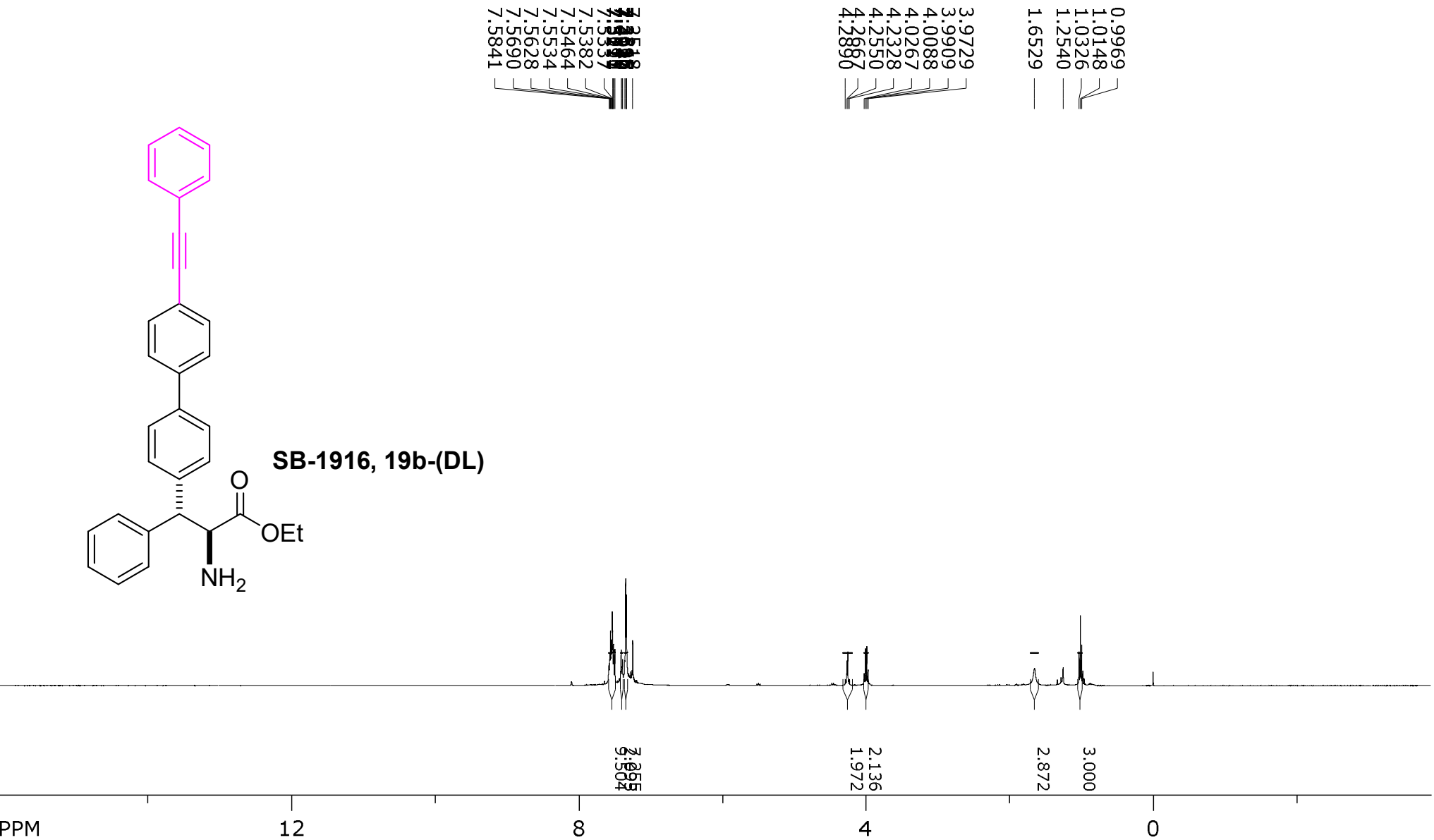


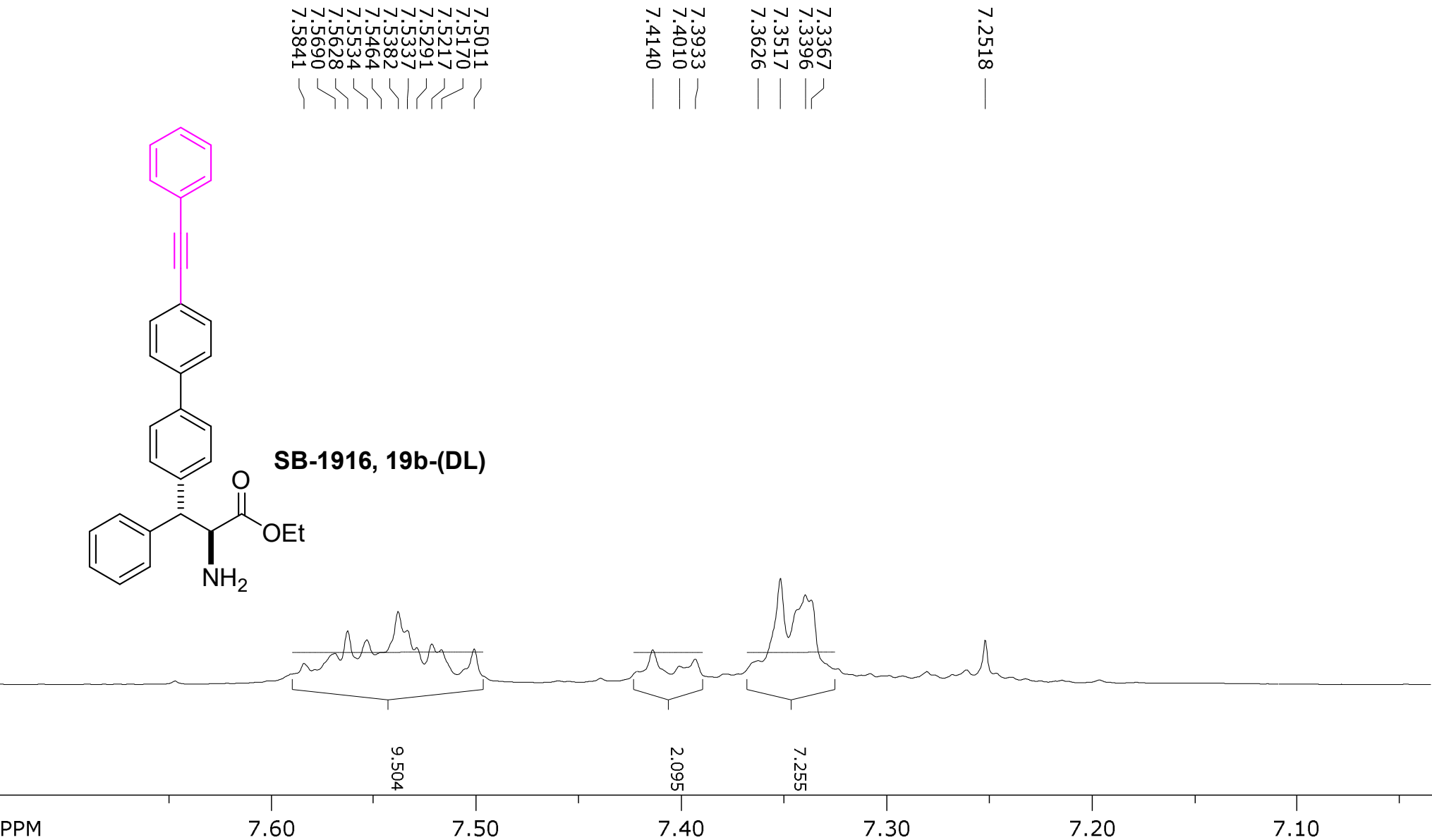


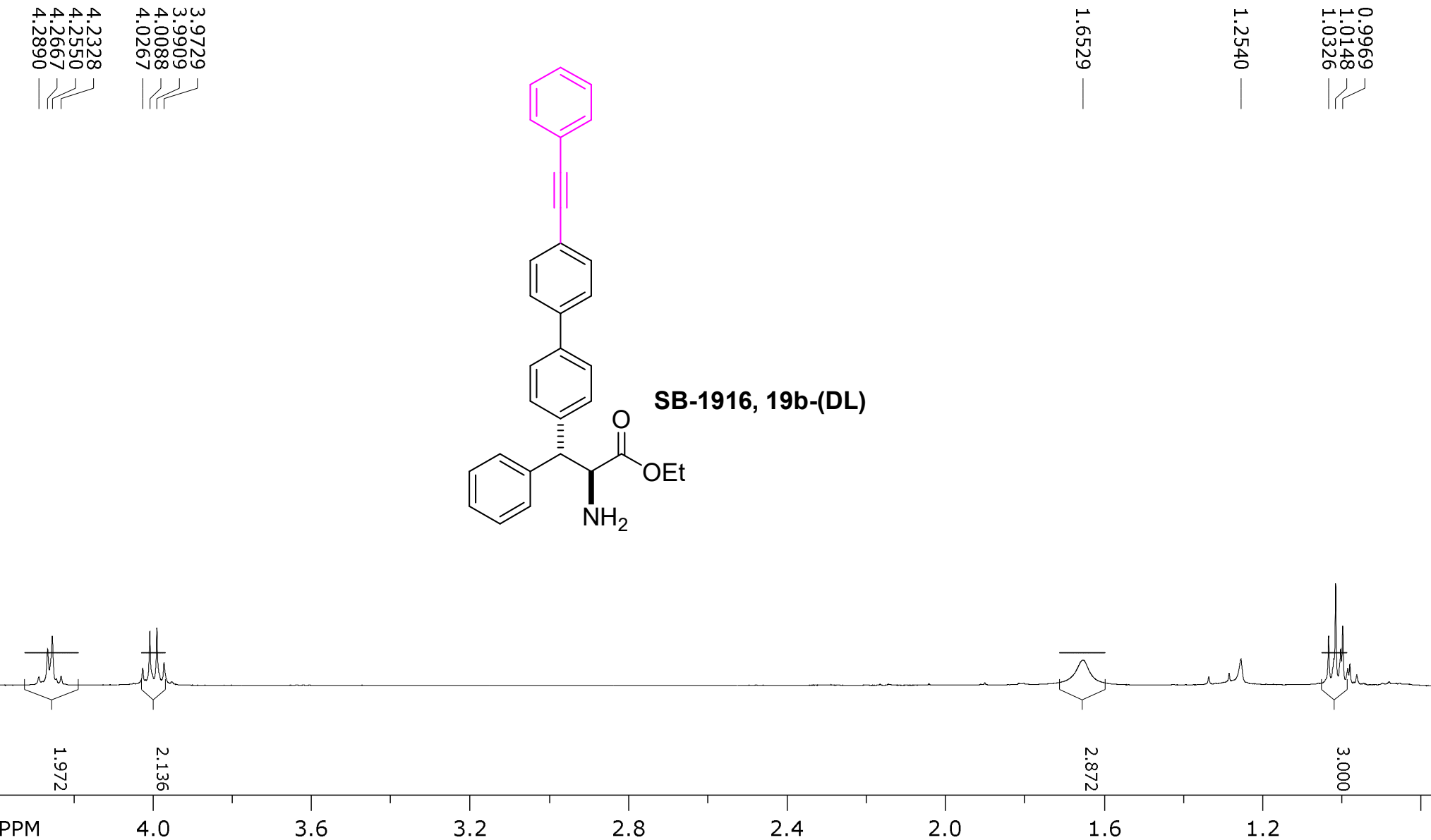


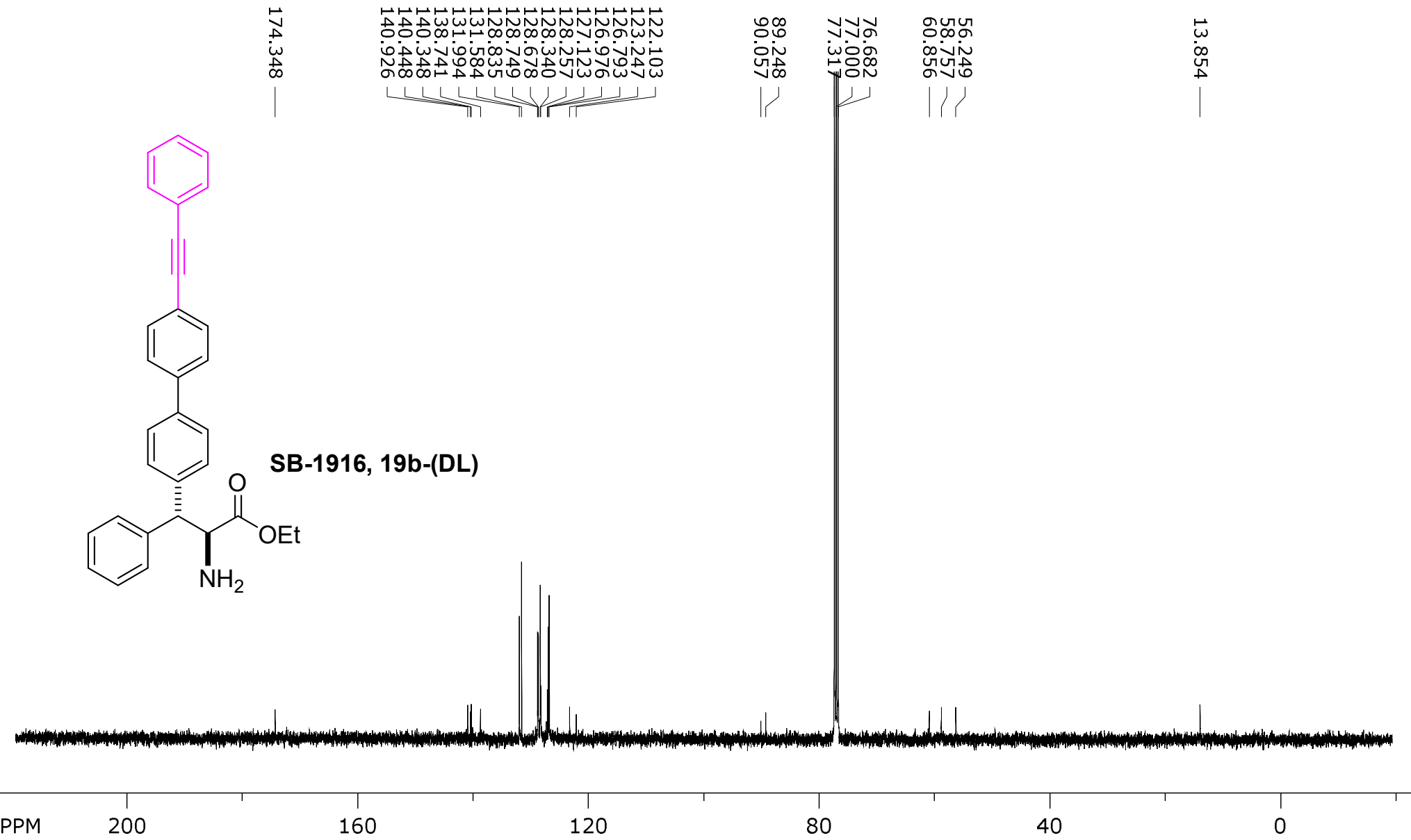


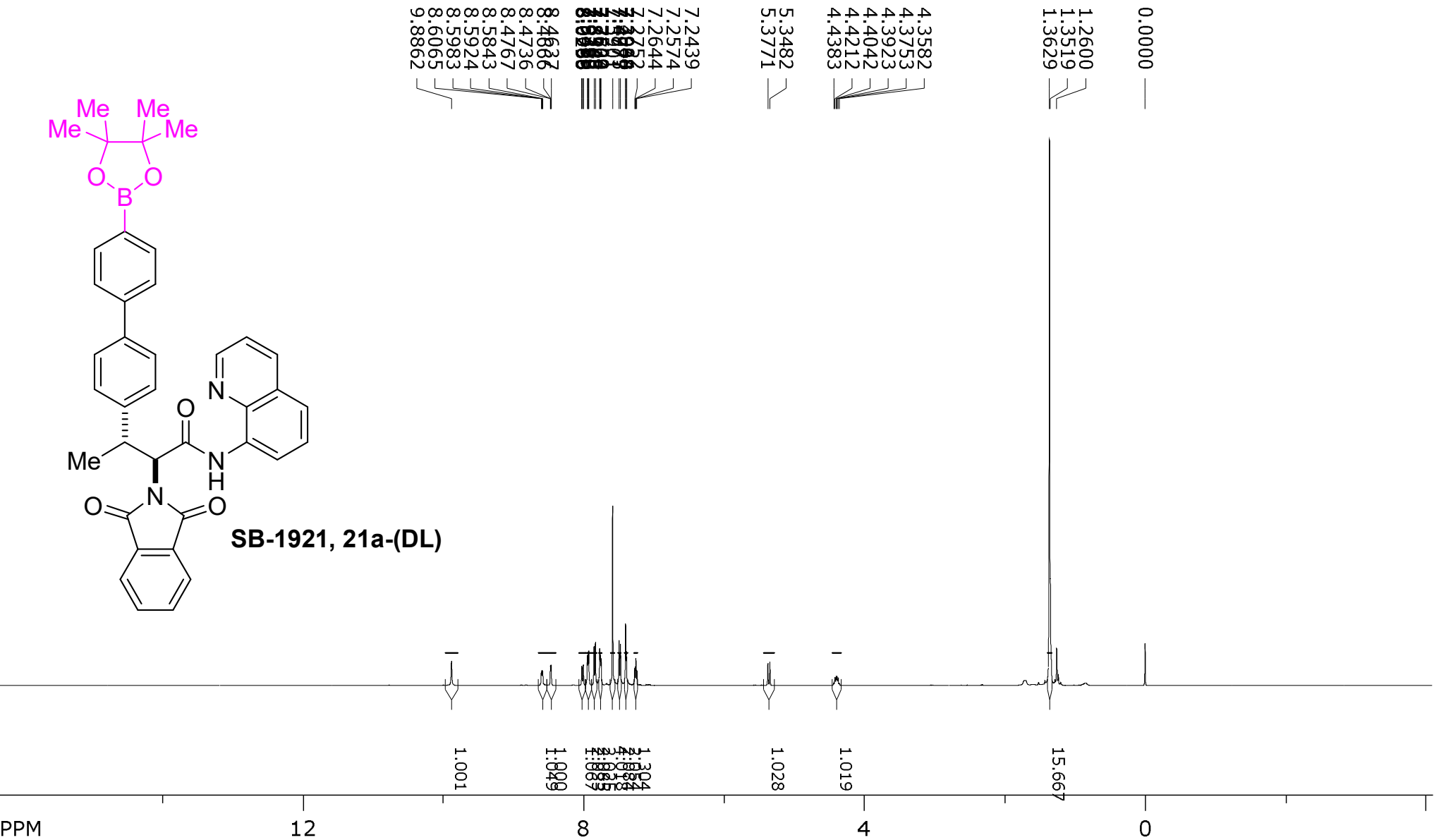


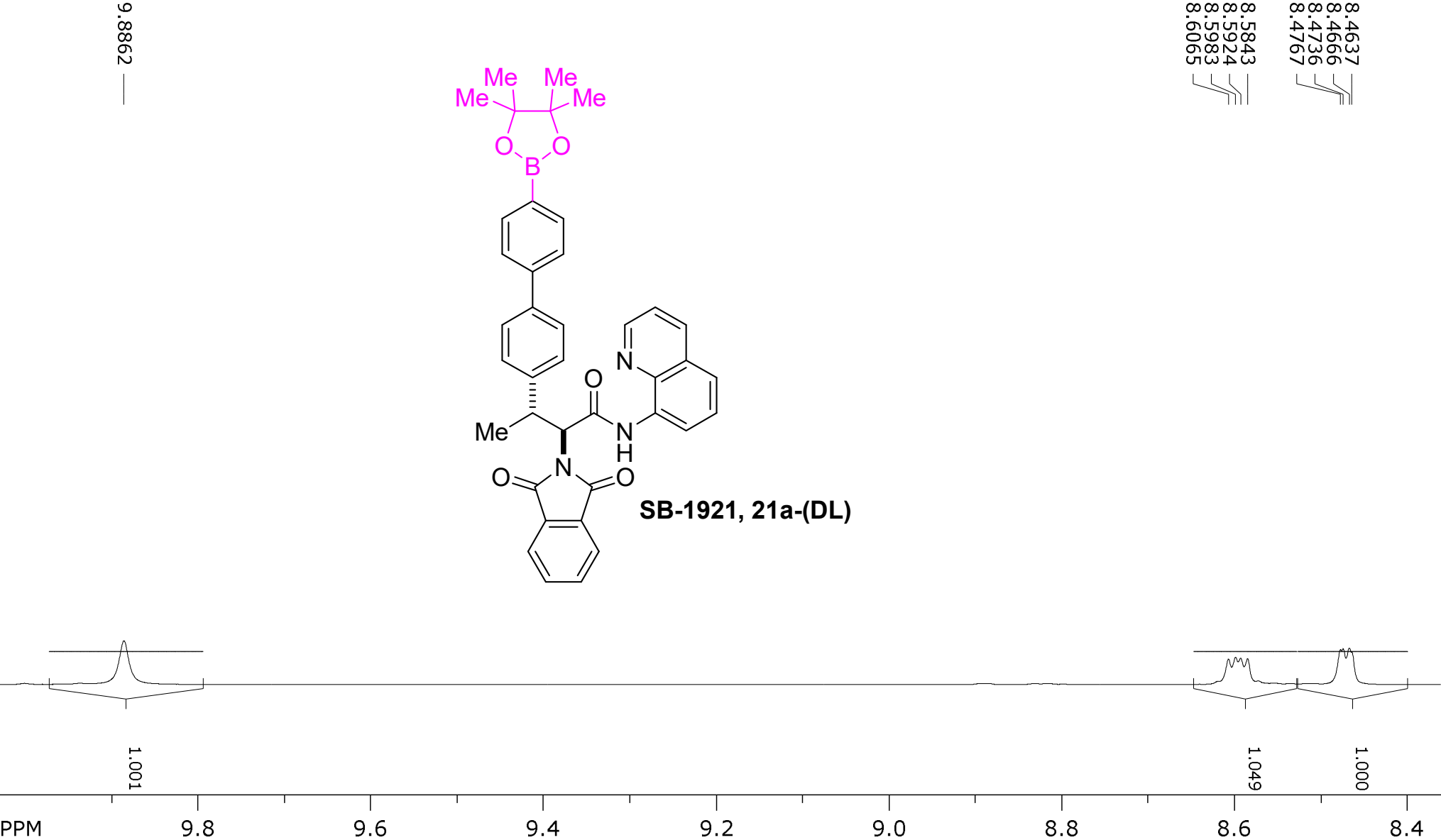


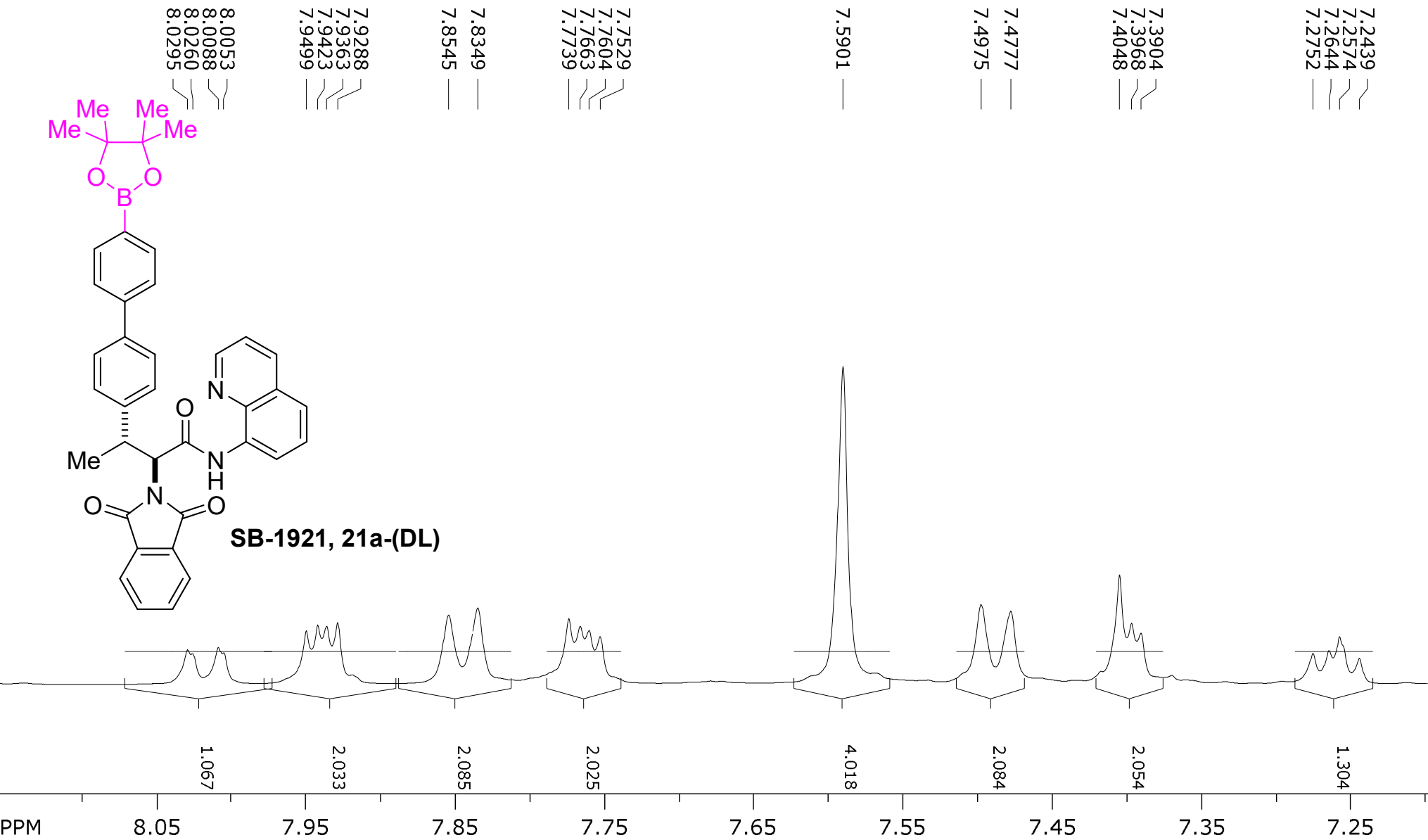


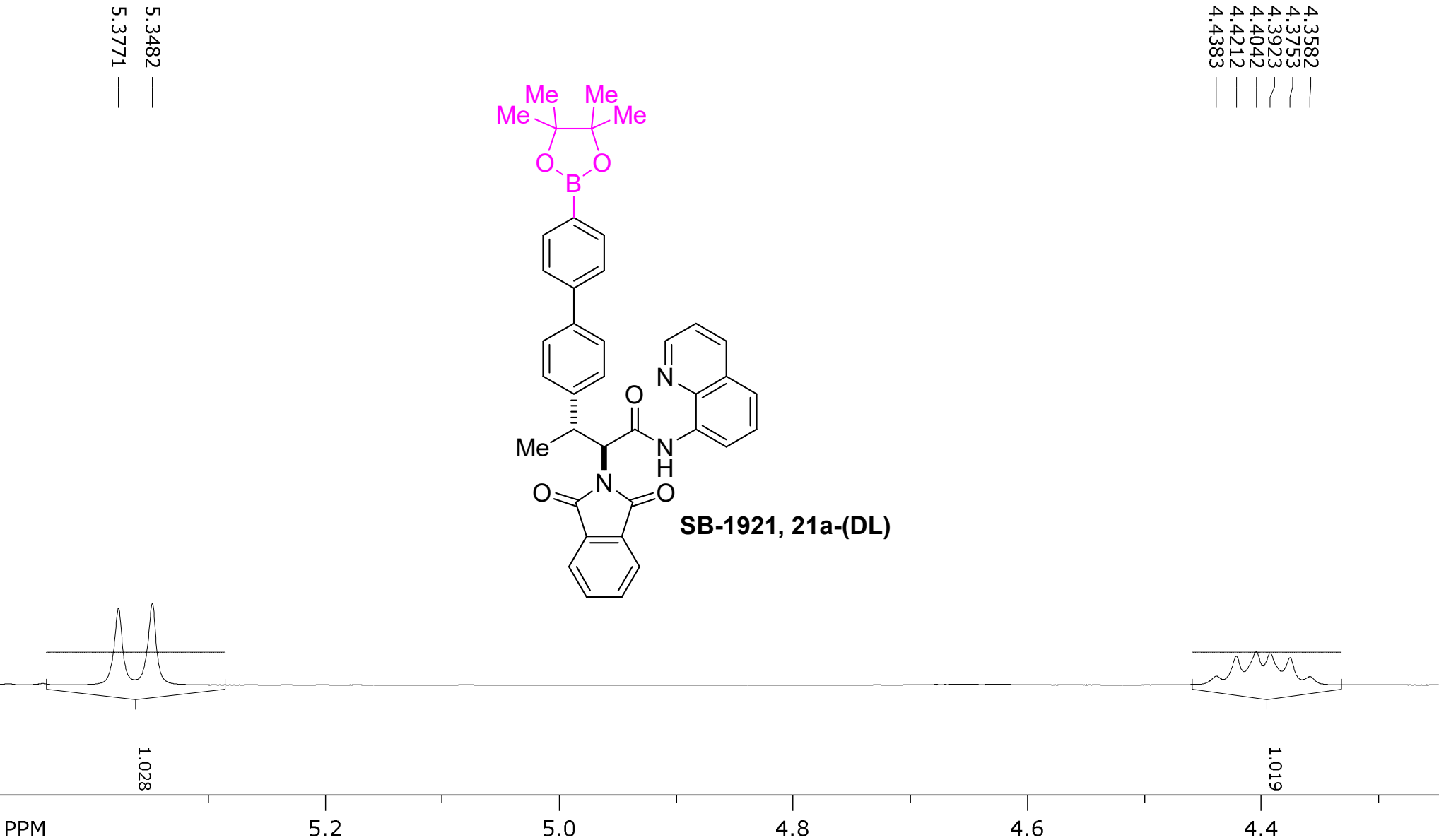


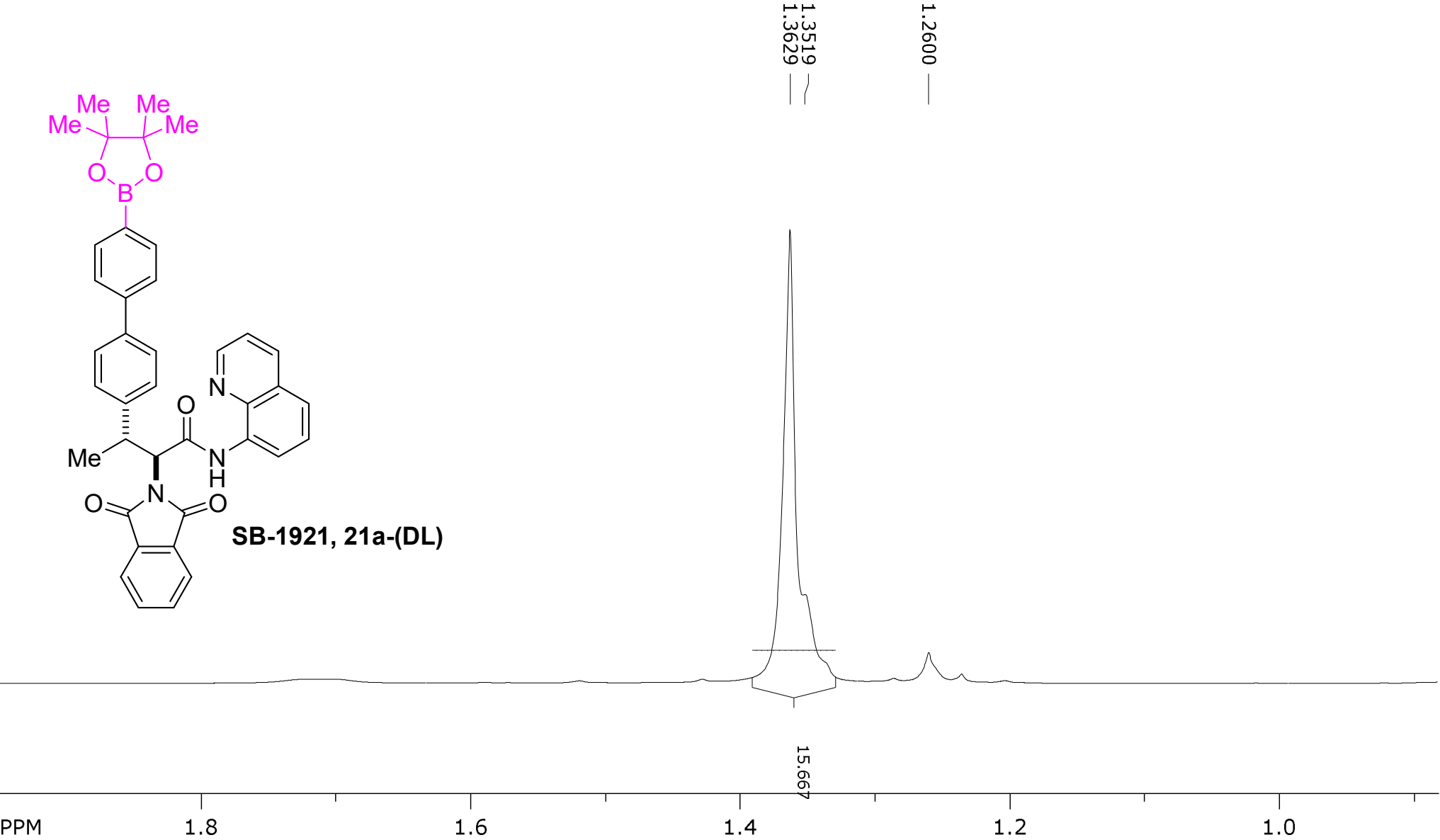


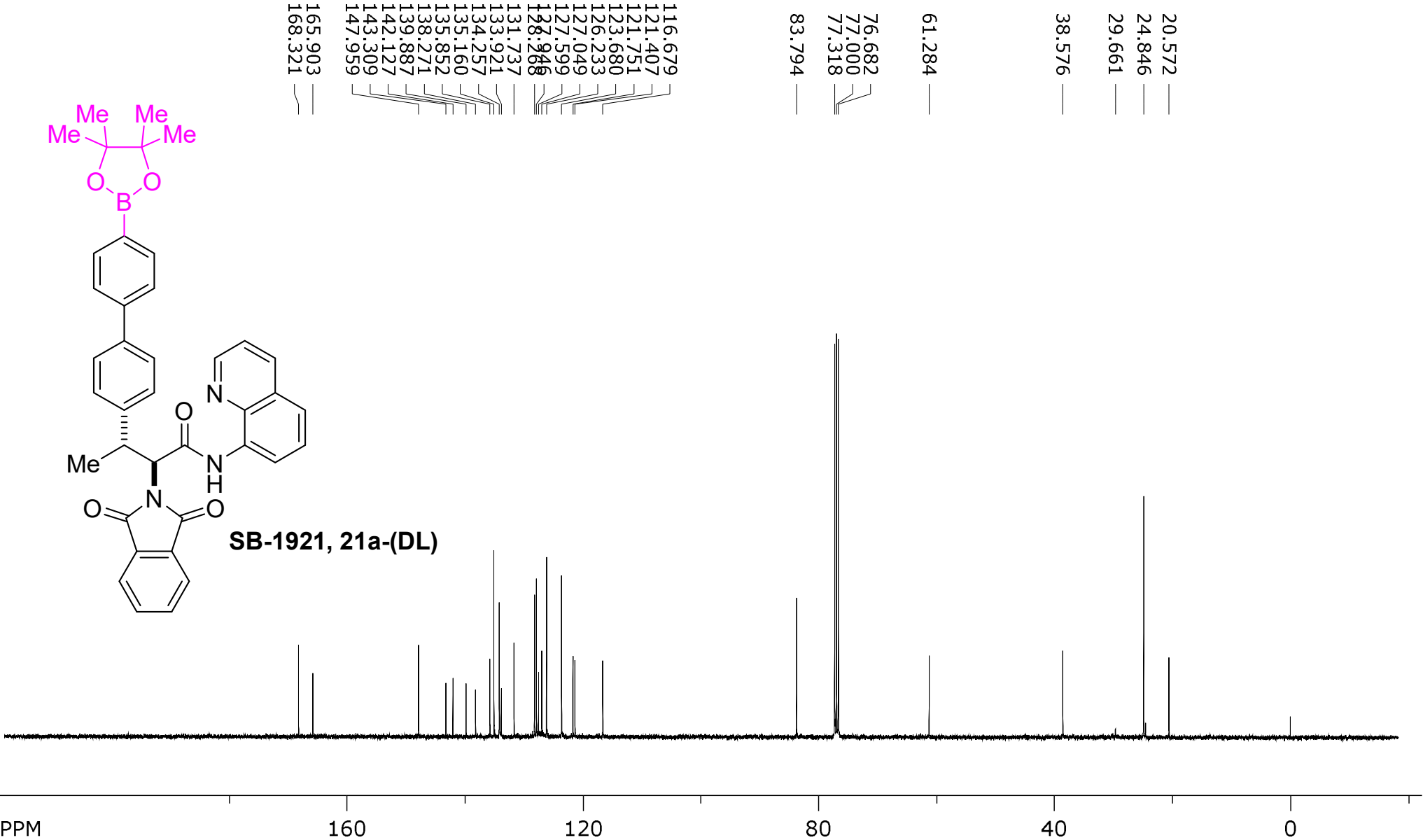




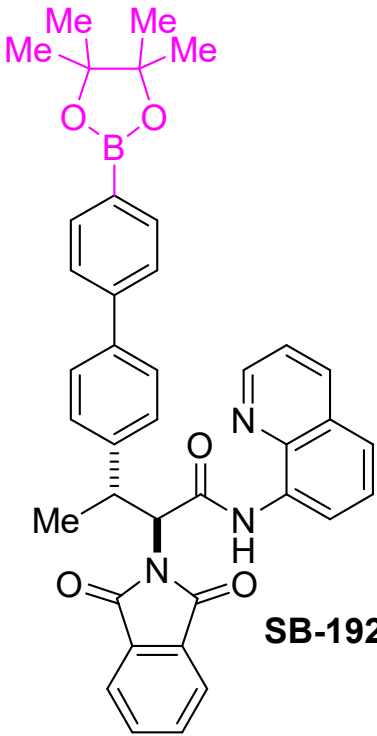




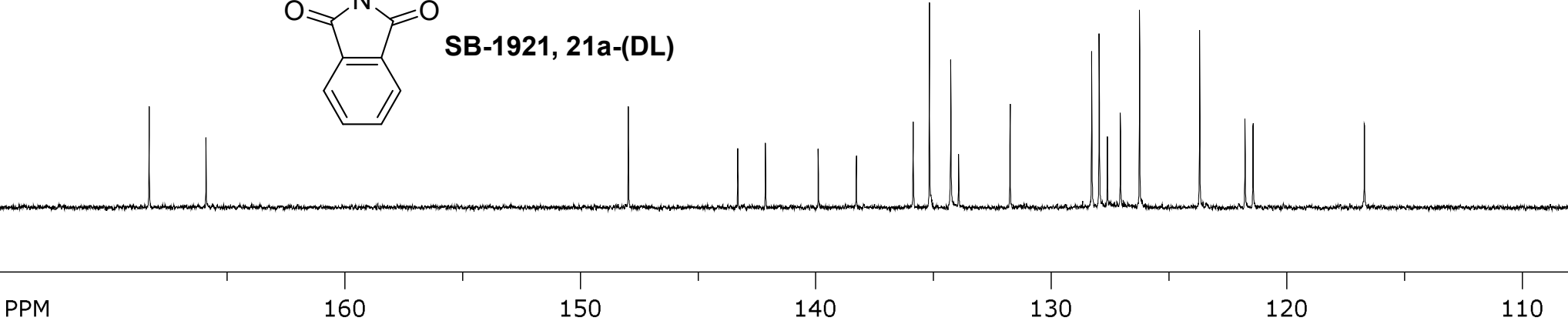


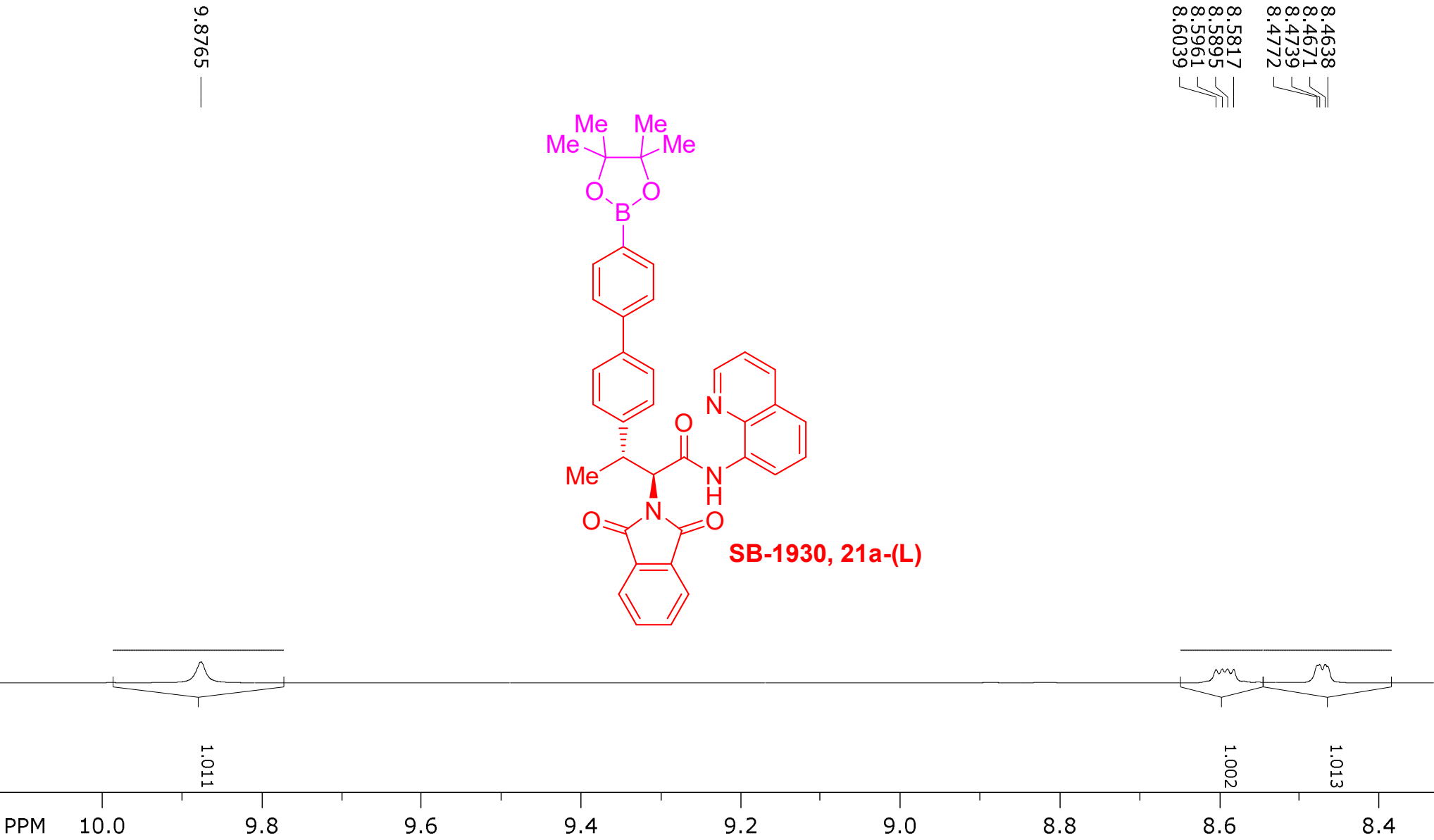


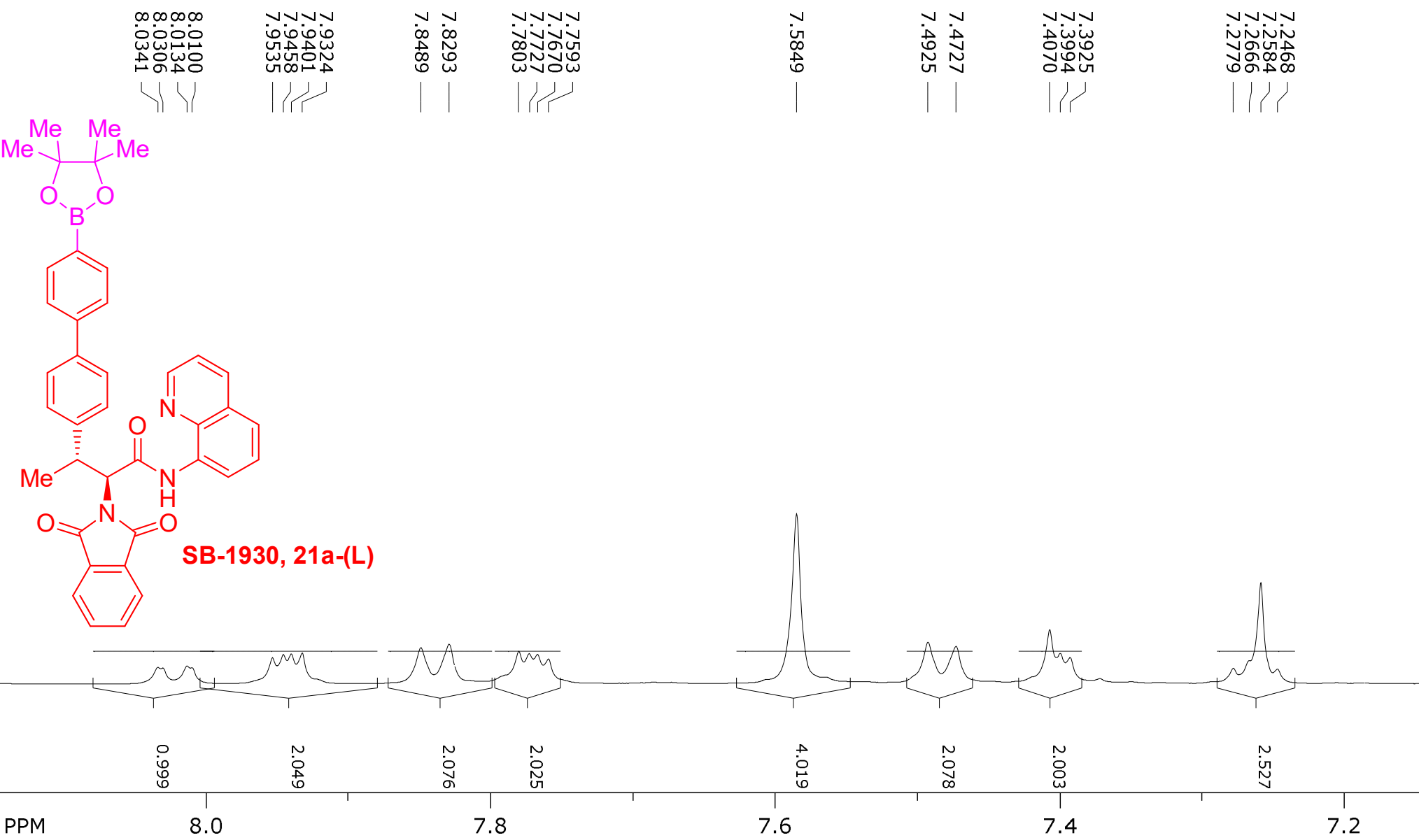
168.321 —
165.903 —
147.959 —
143.309 —
142.127 —
139.887 —
138.271 —
135.852 —
135.160 —
134.257 —
133.921 —
131.737 —
128.268 —
127.946 —
127.599 —
127.049 —
126.233 —
123.680 —
121.751 —
121.407 —
116.679 —

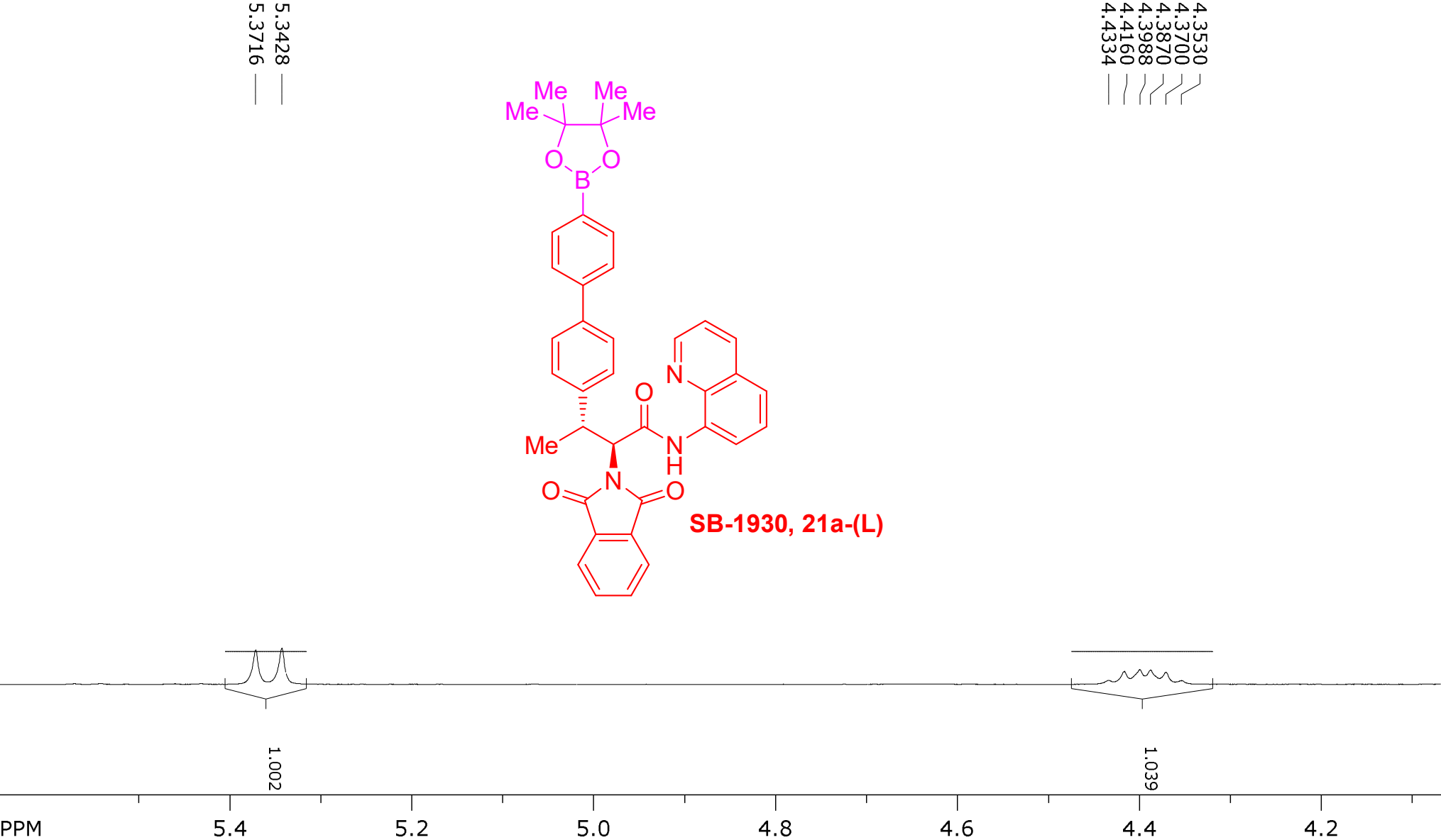


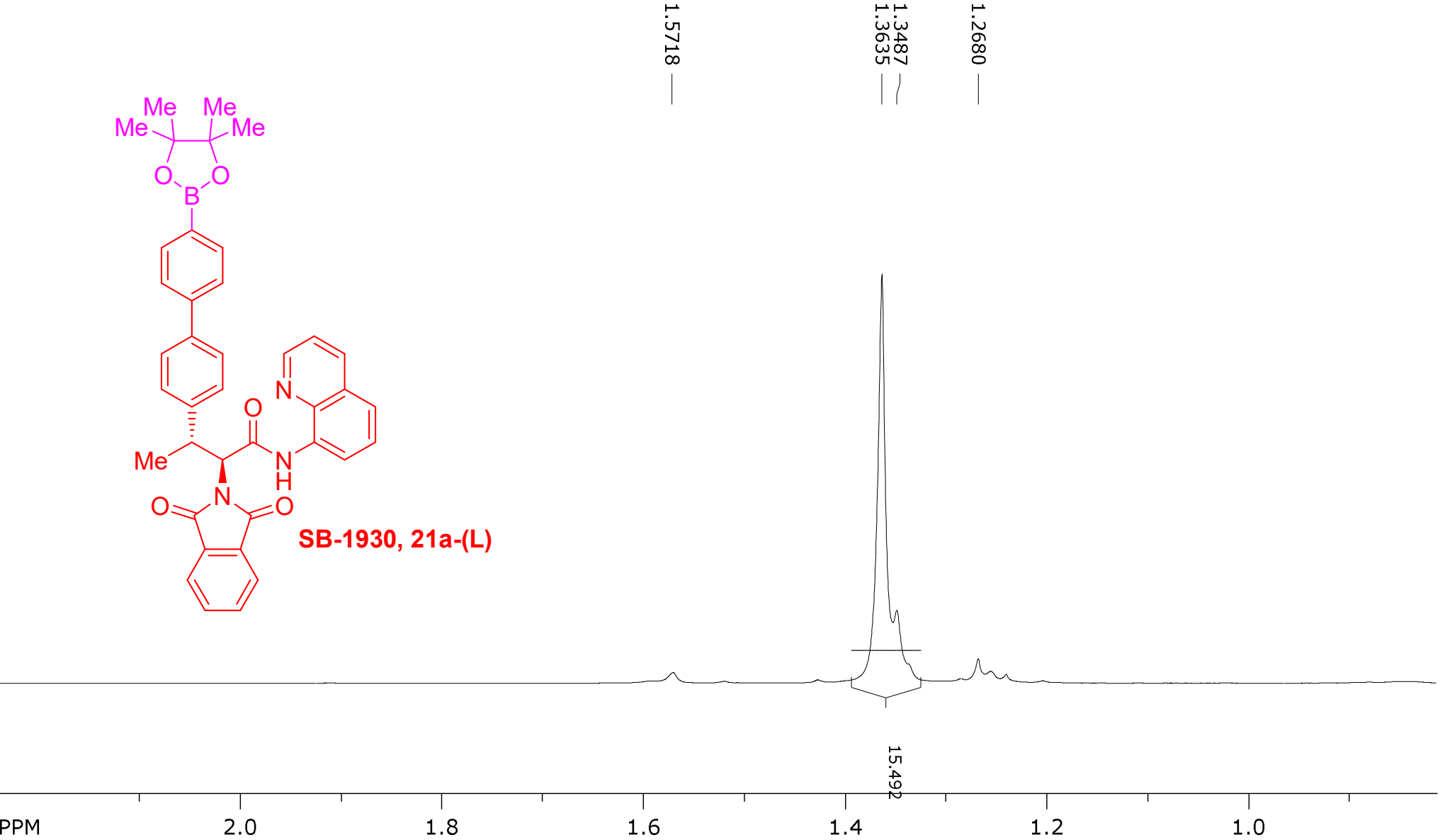
SB-1921, 21a-(DL)

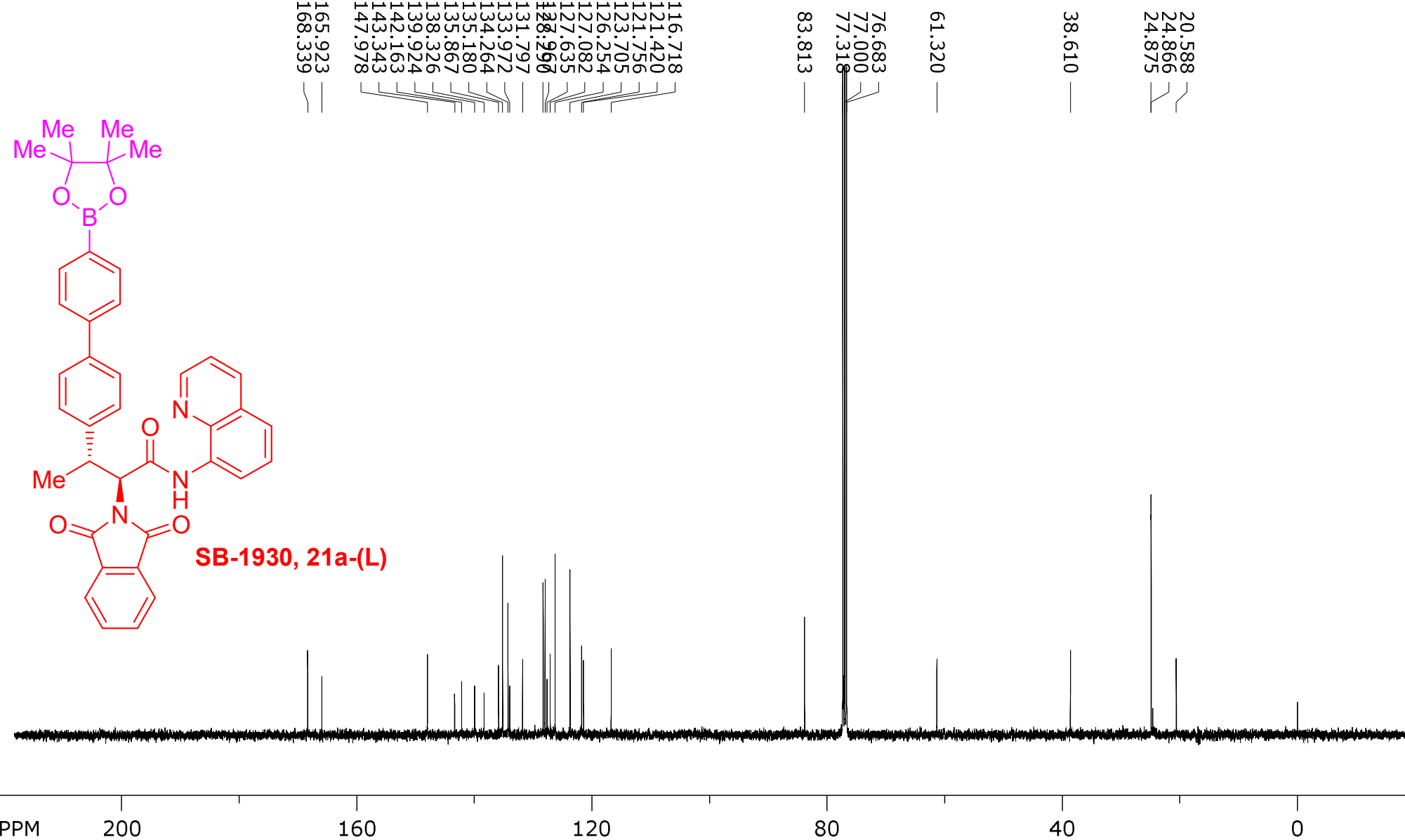


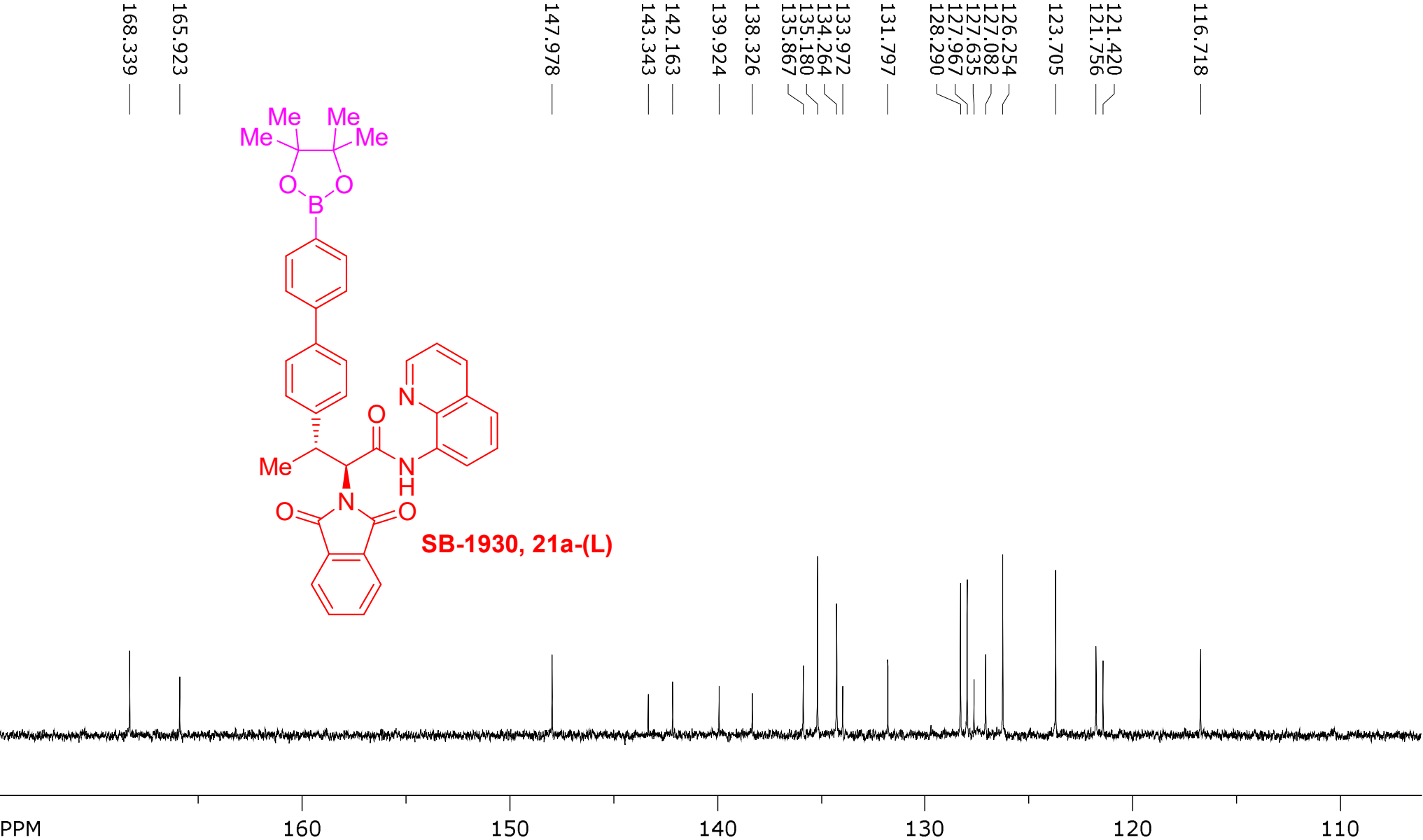


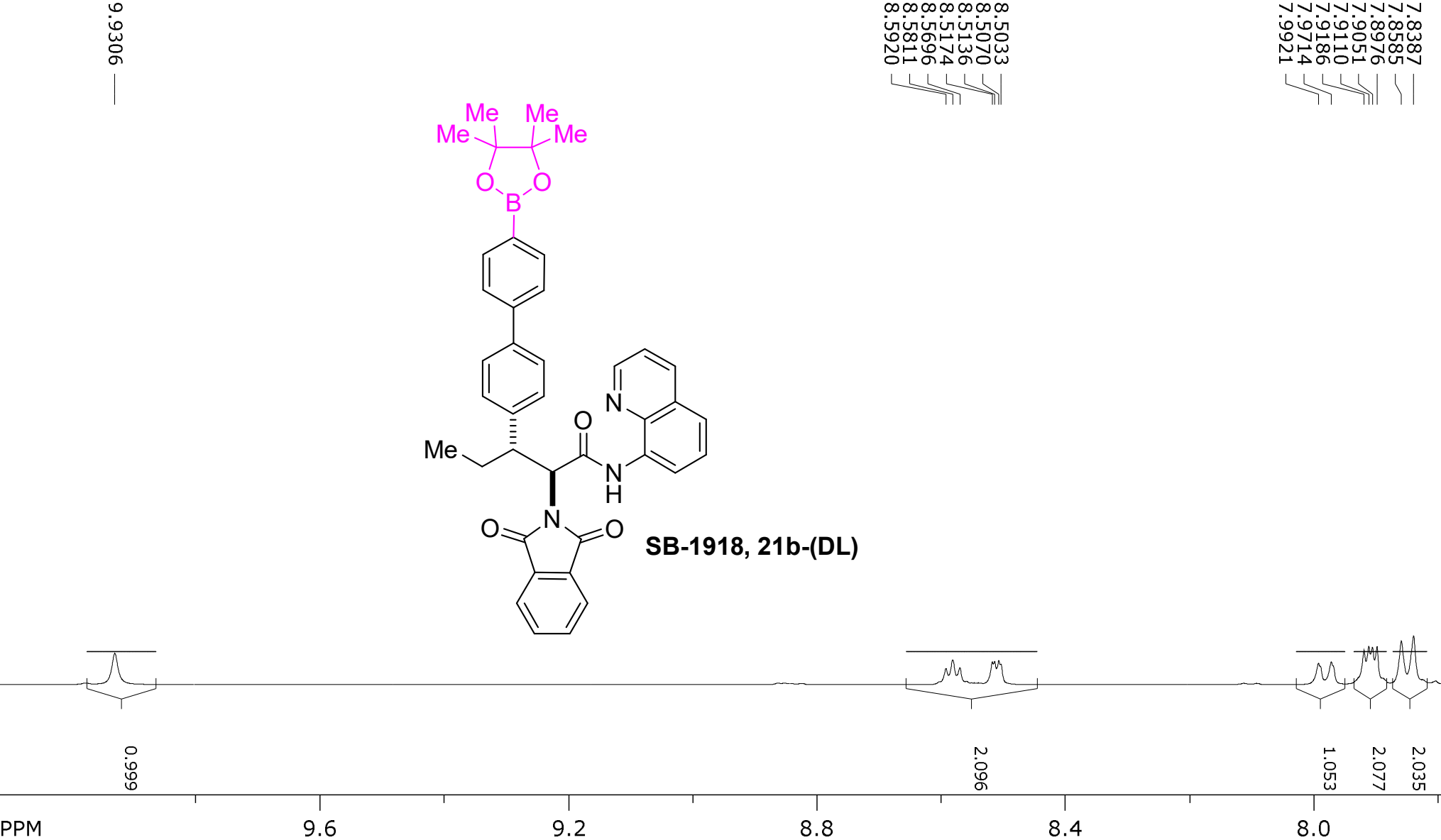


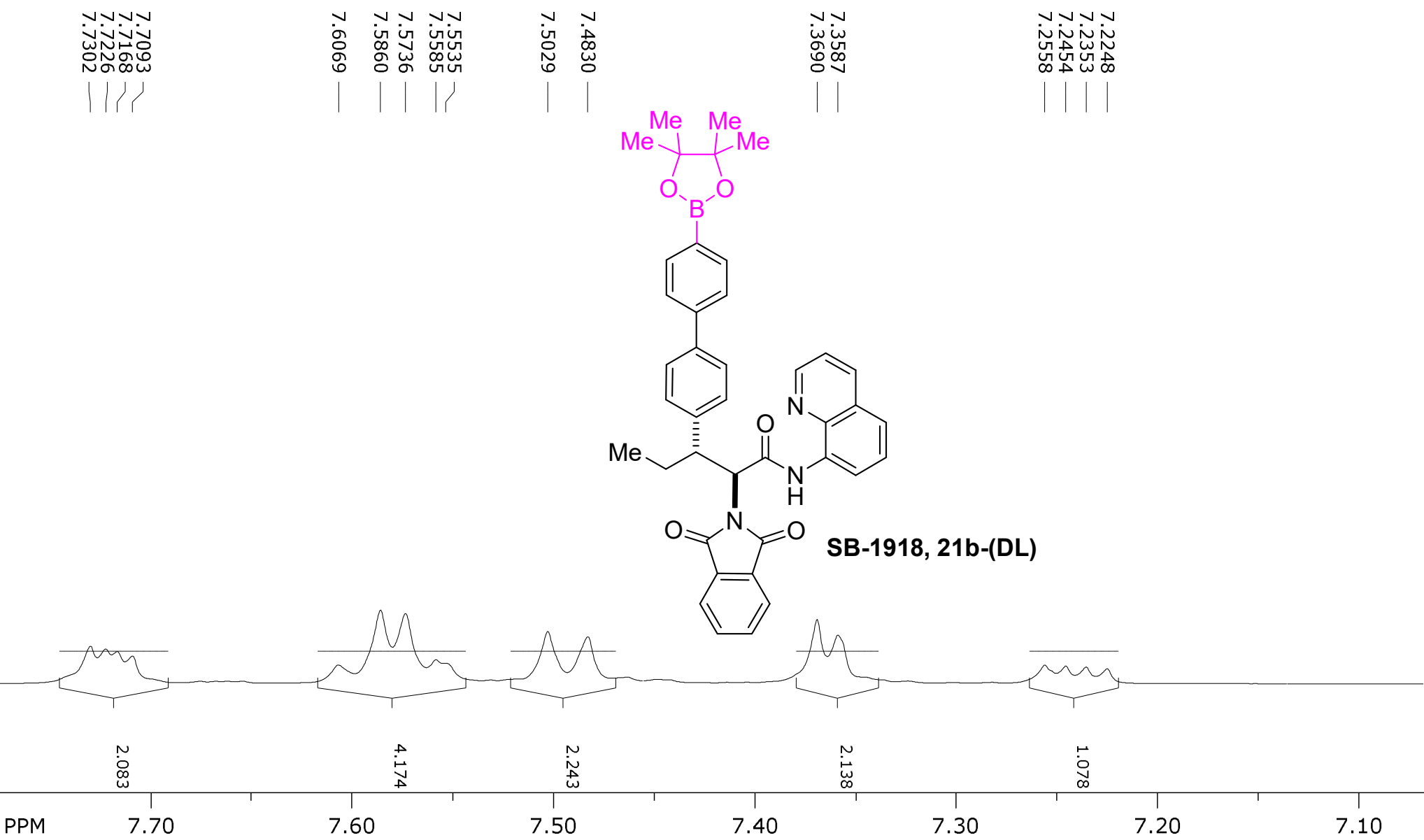


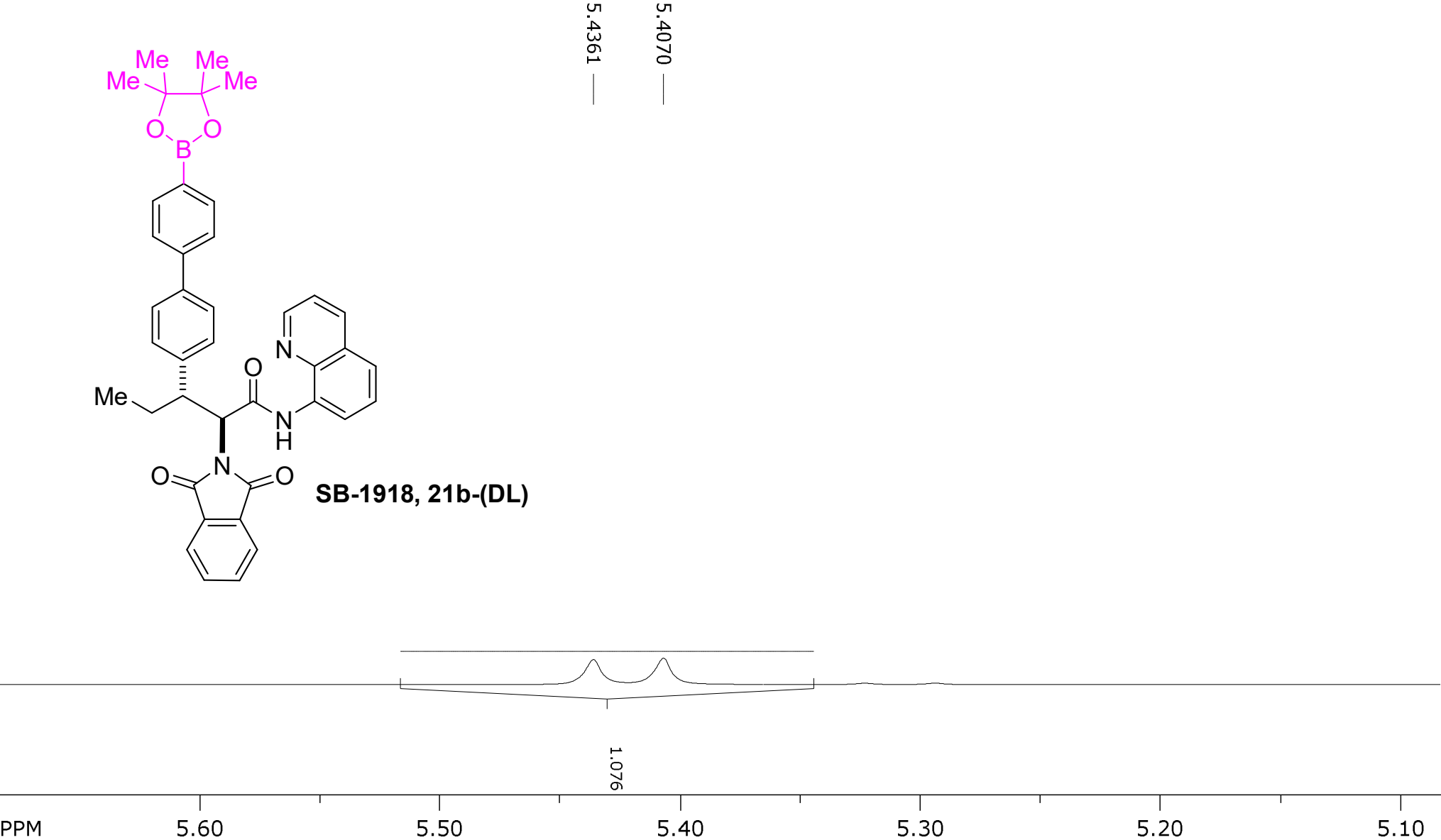


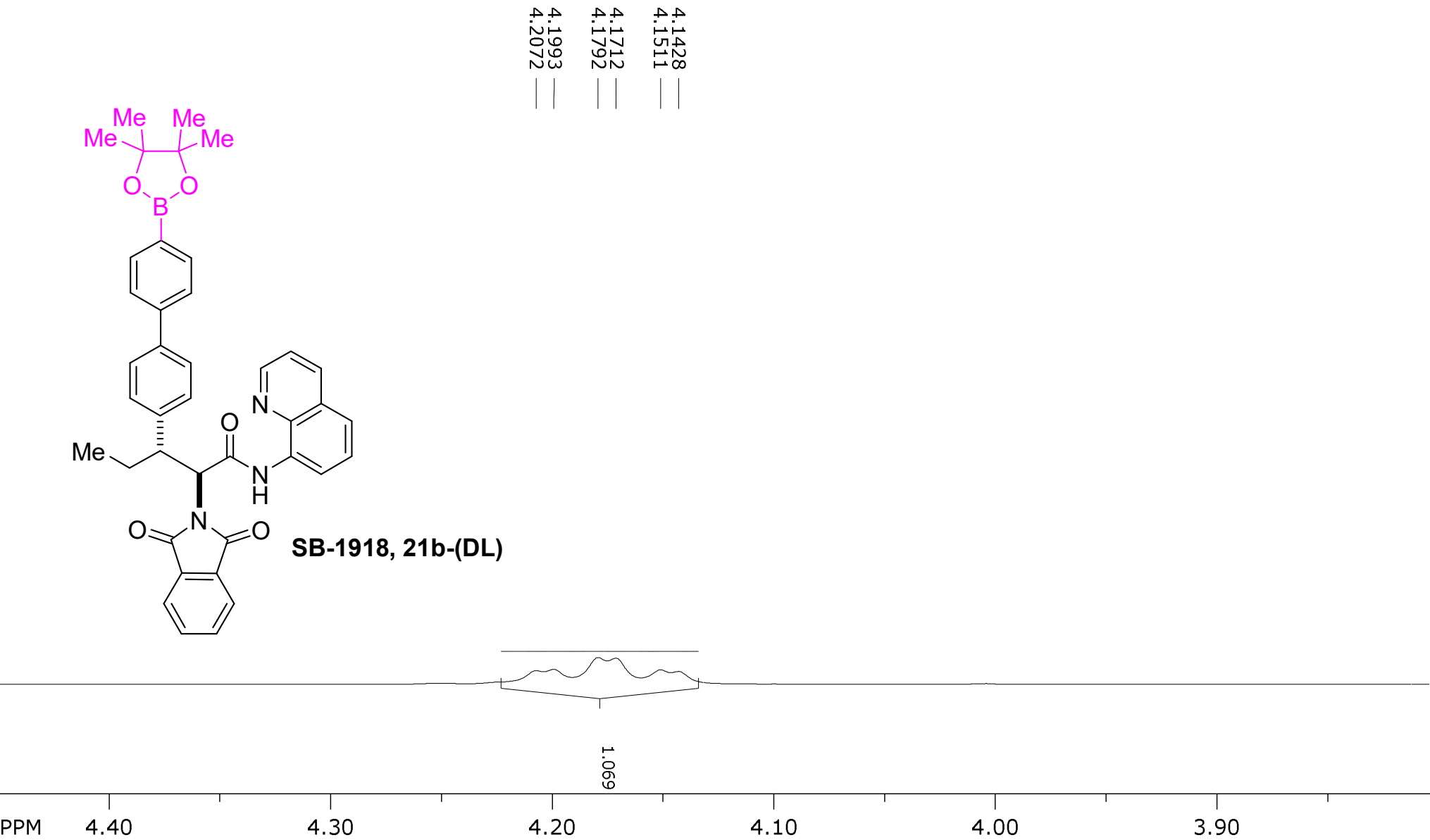


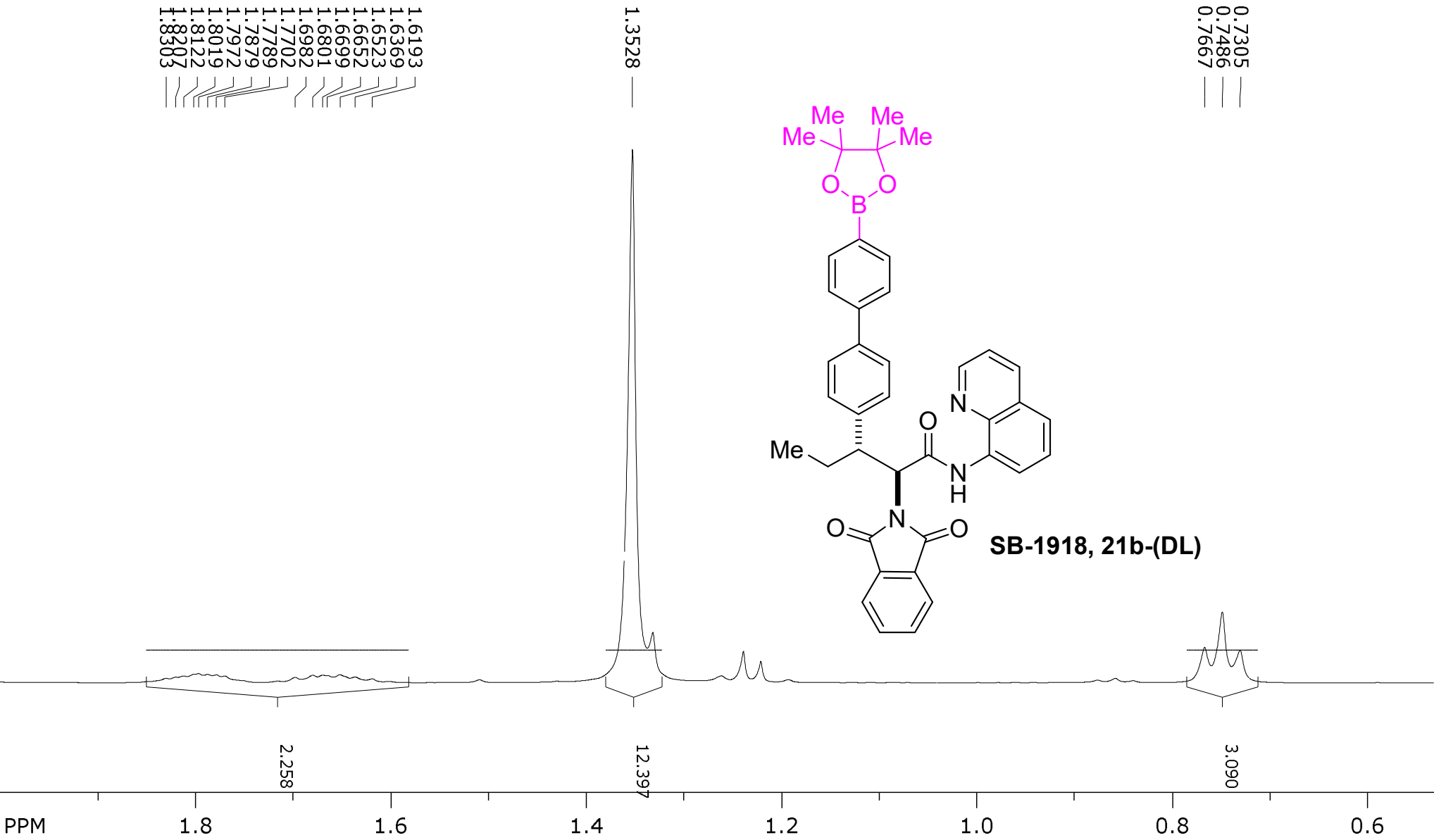


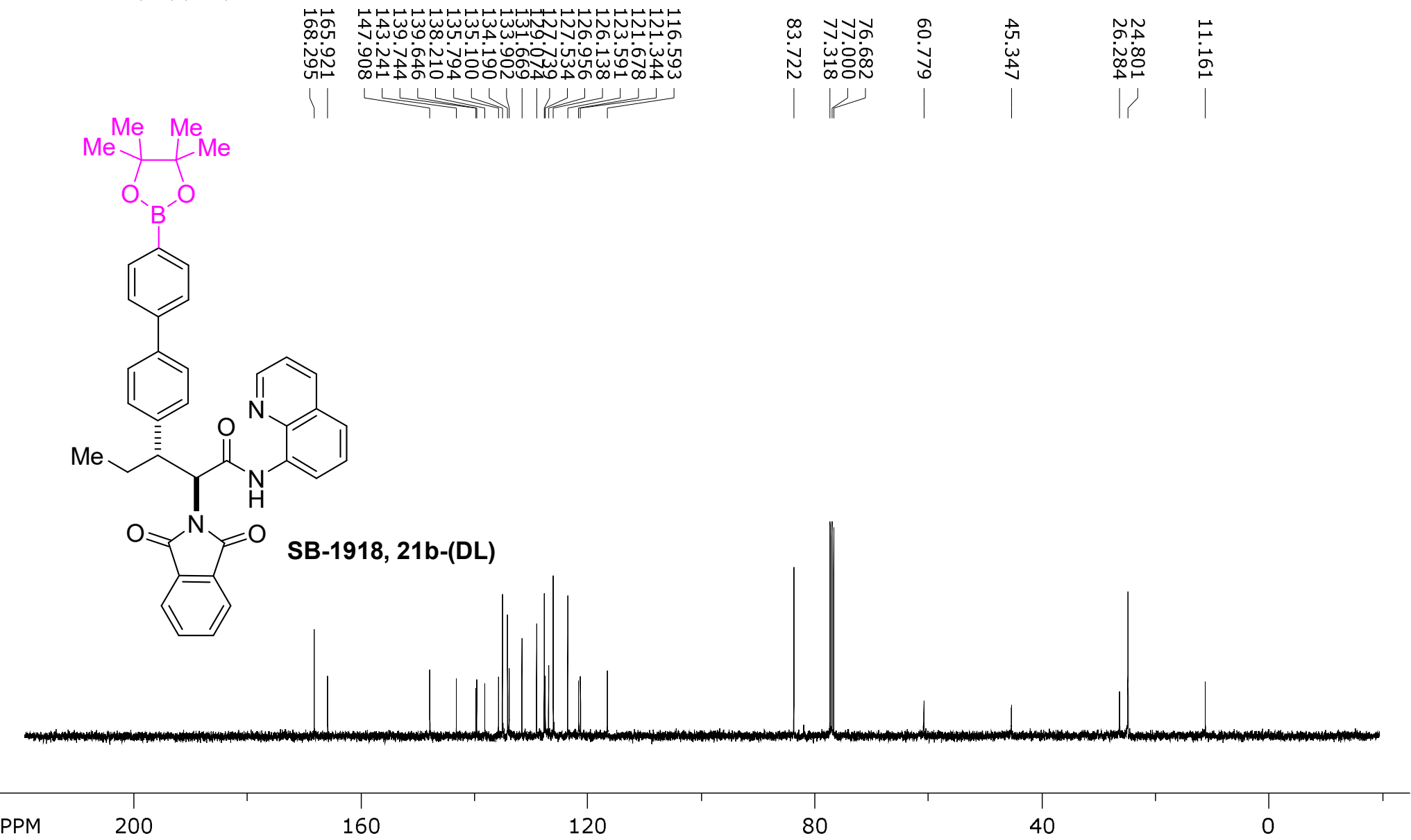


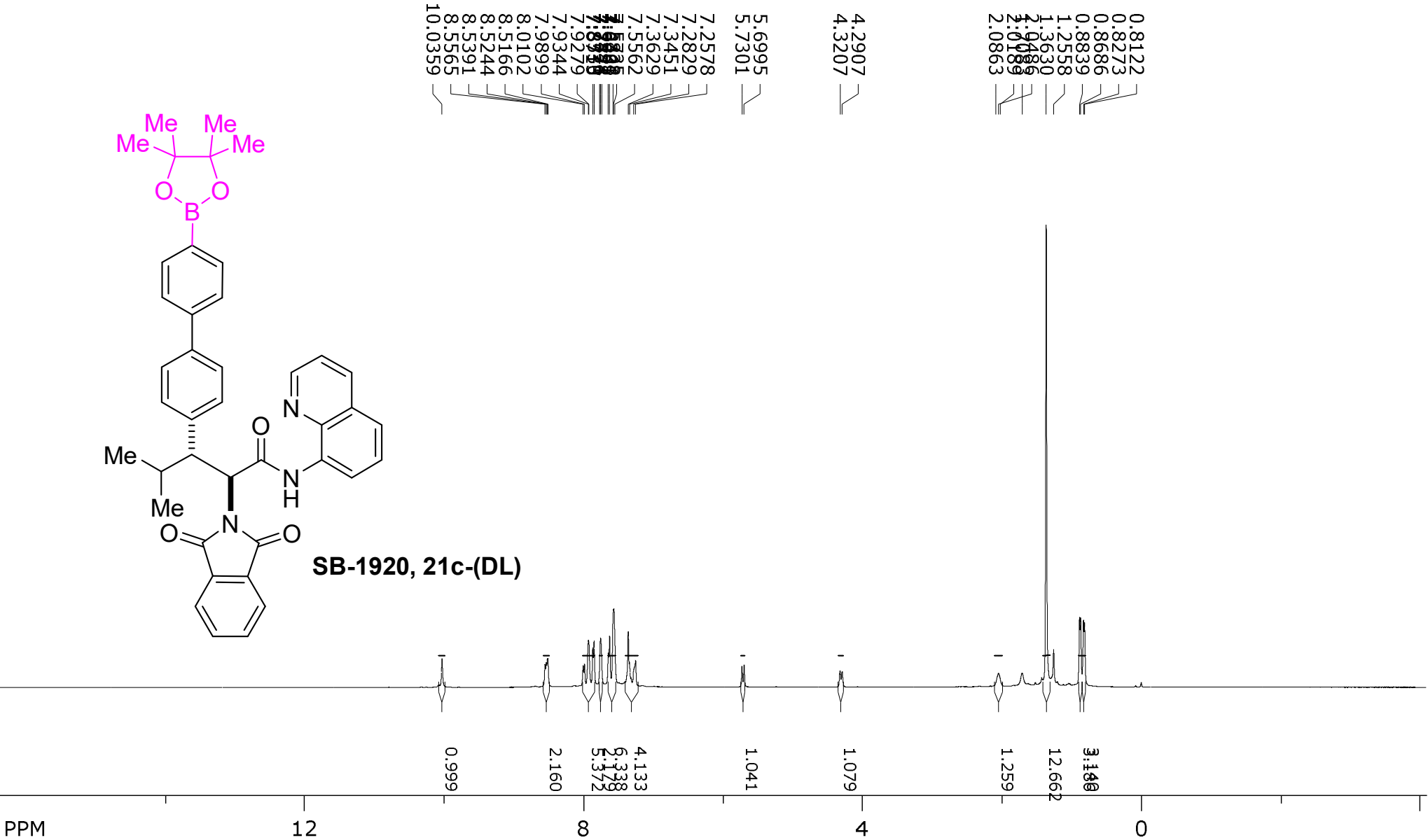


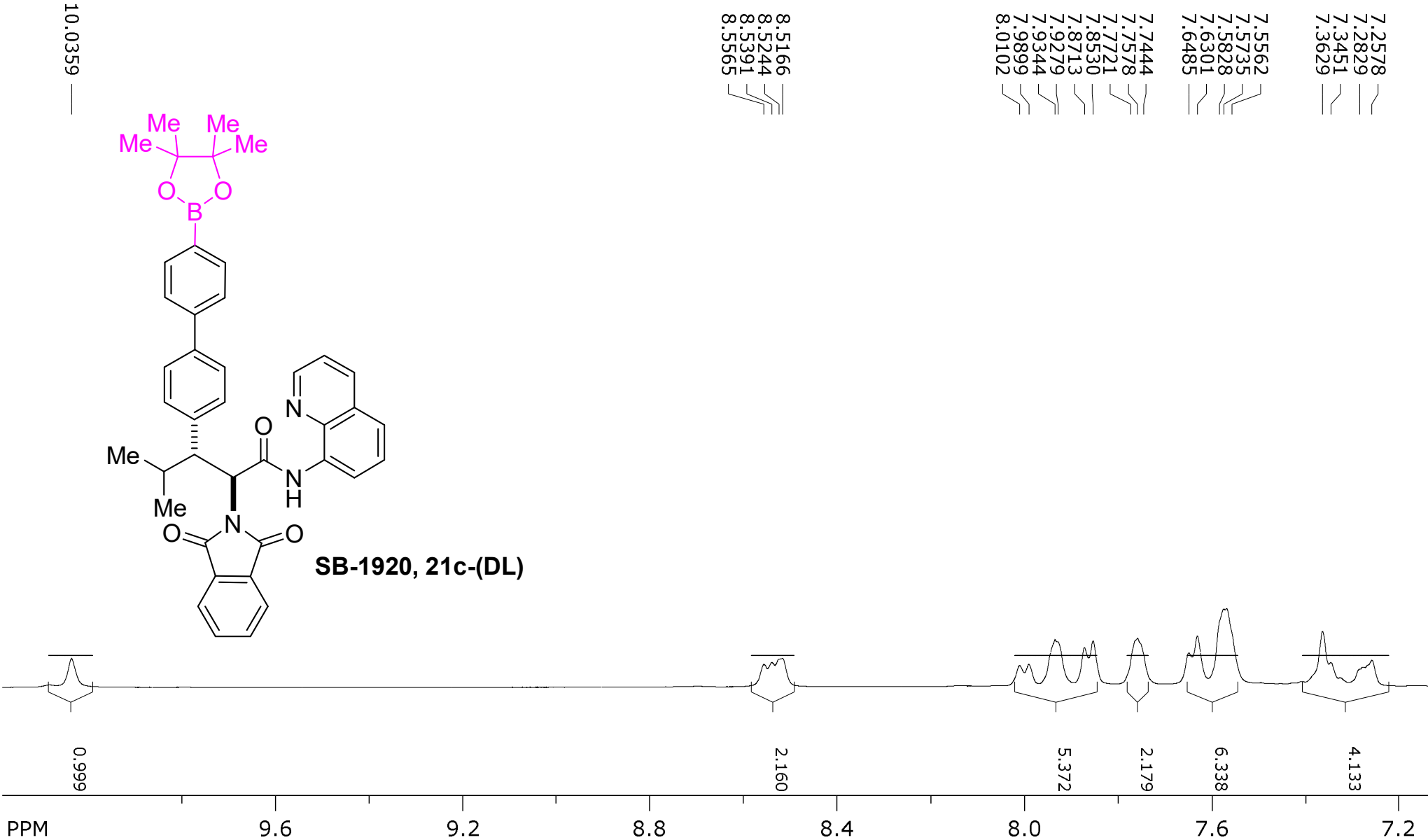


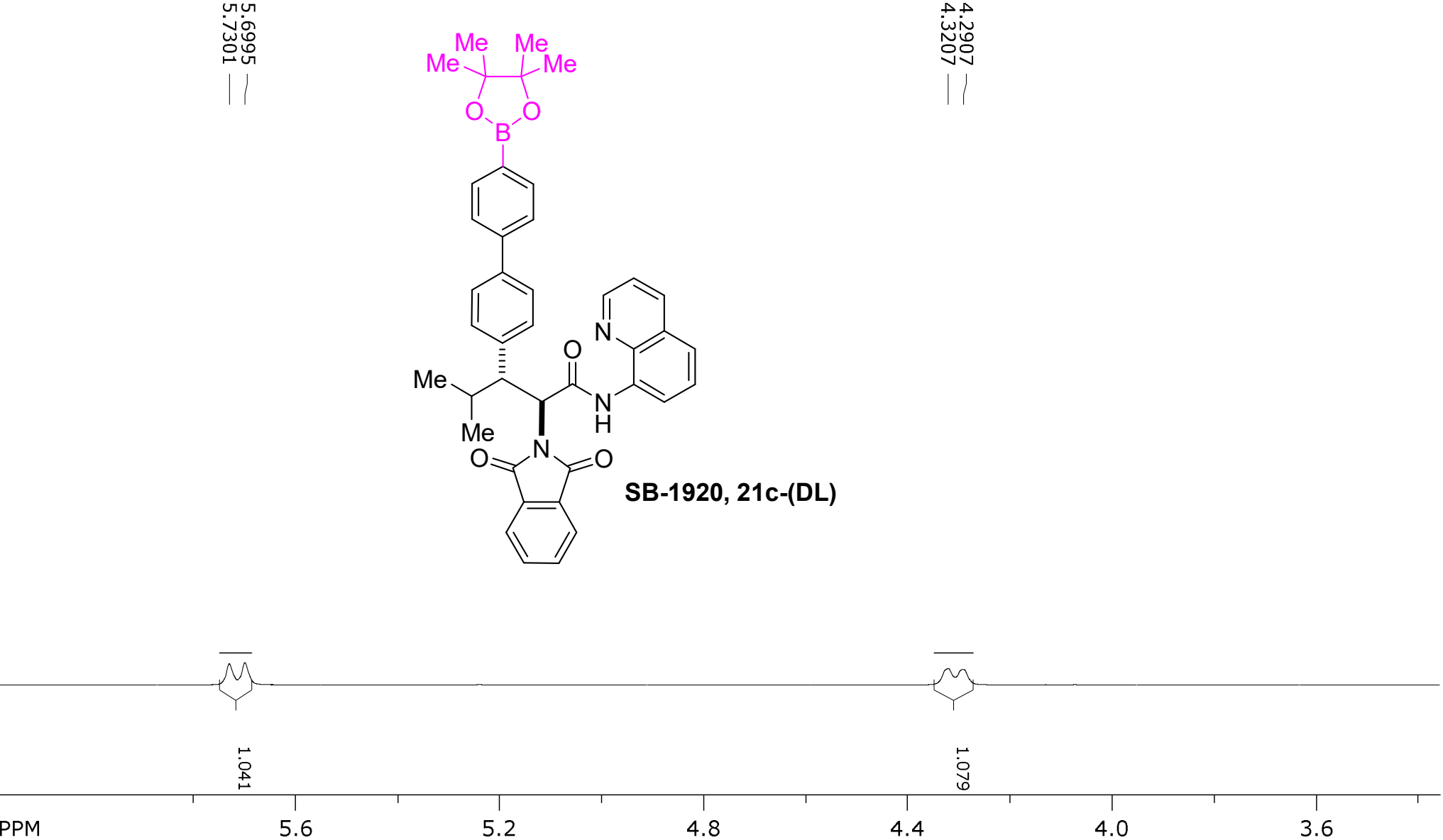


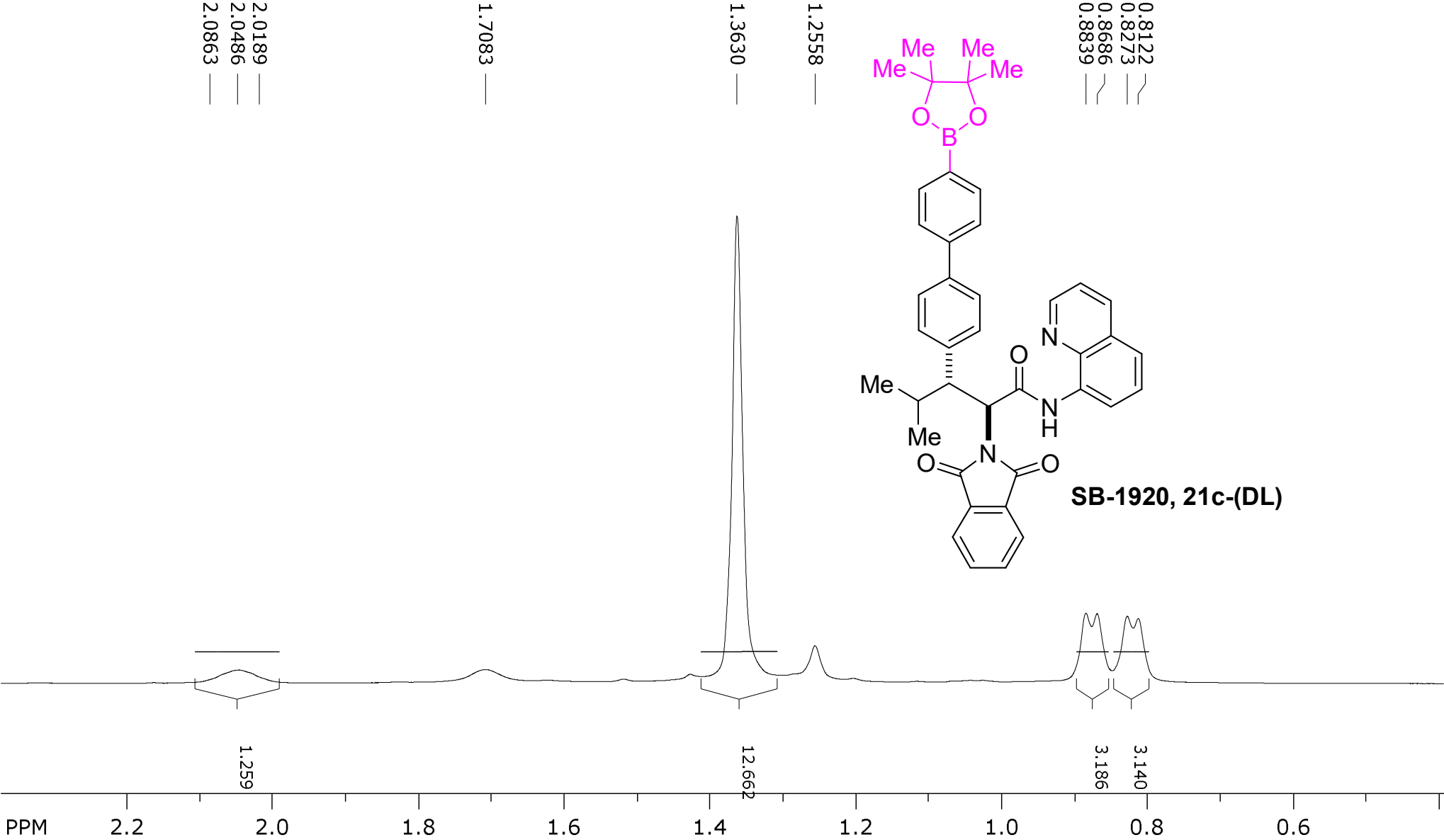


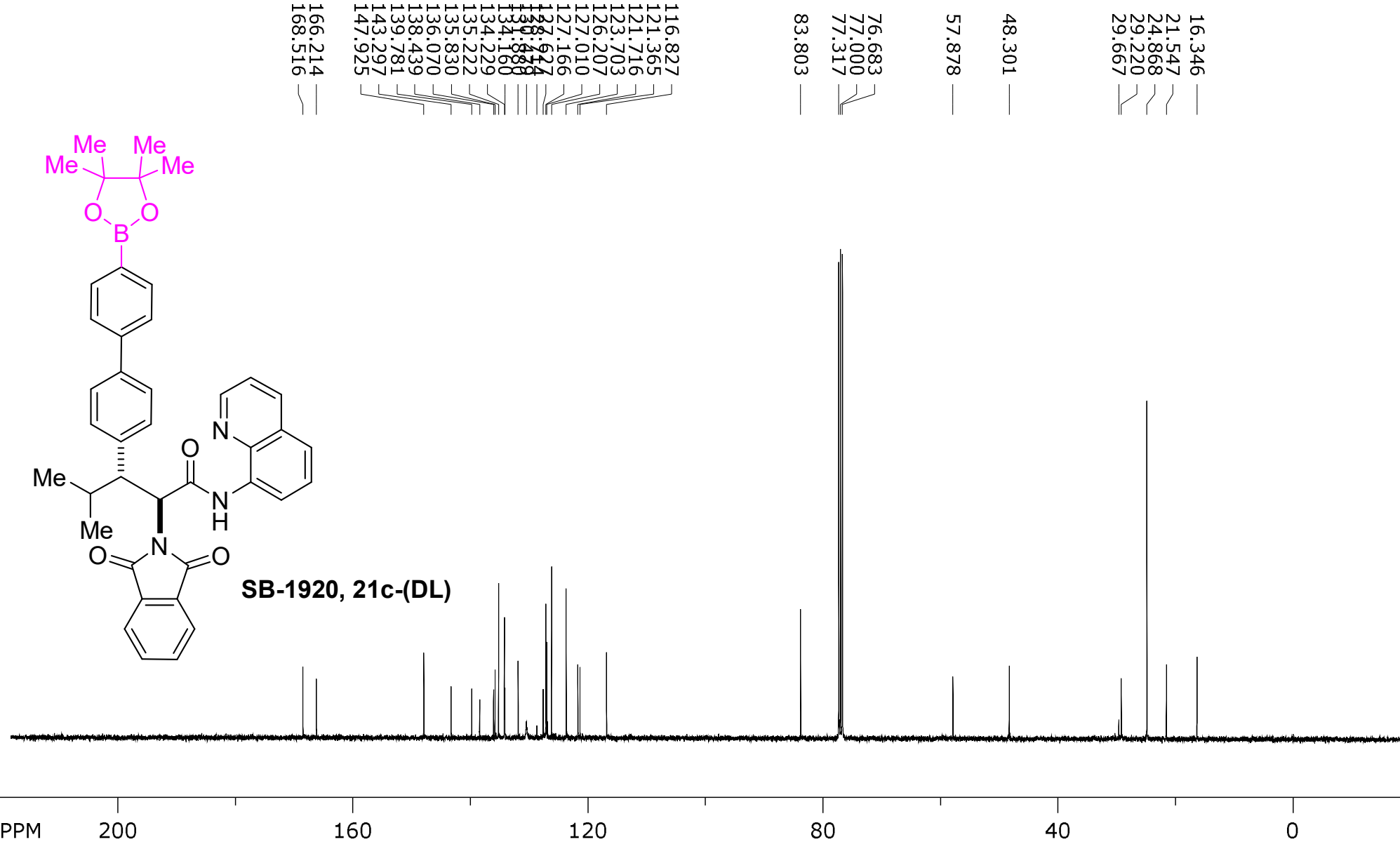


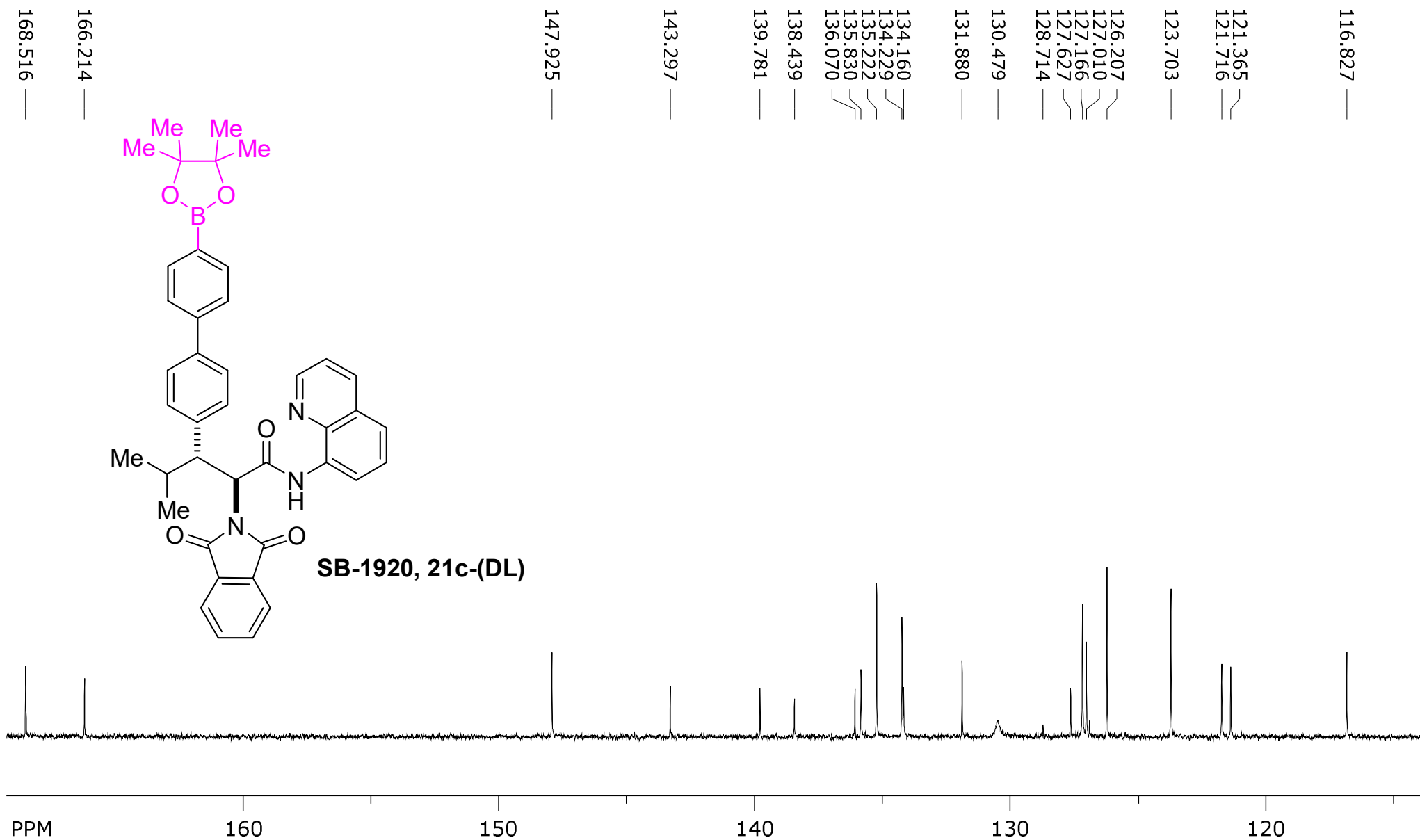


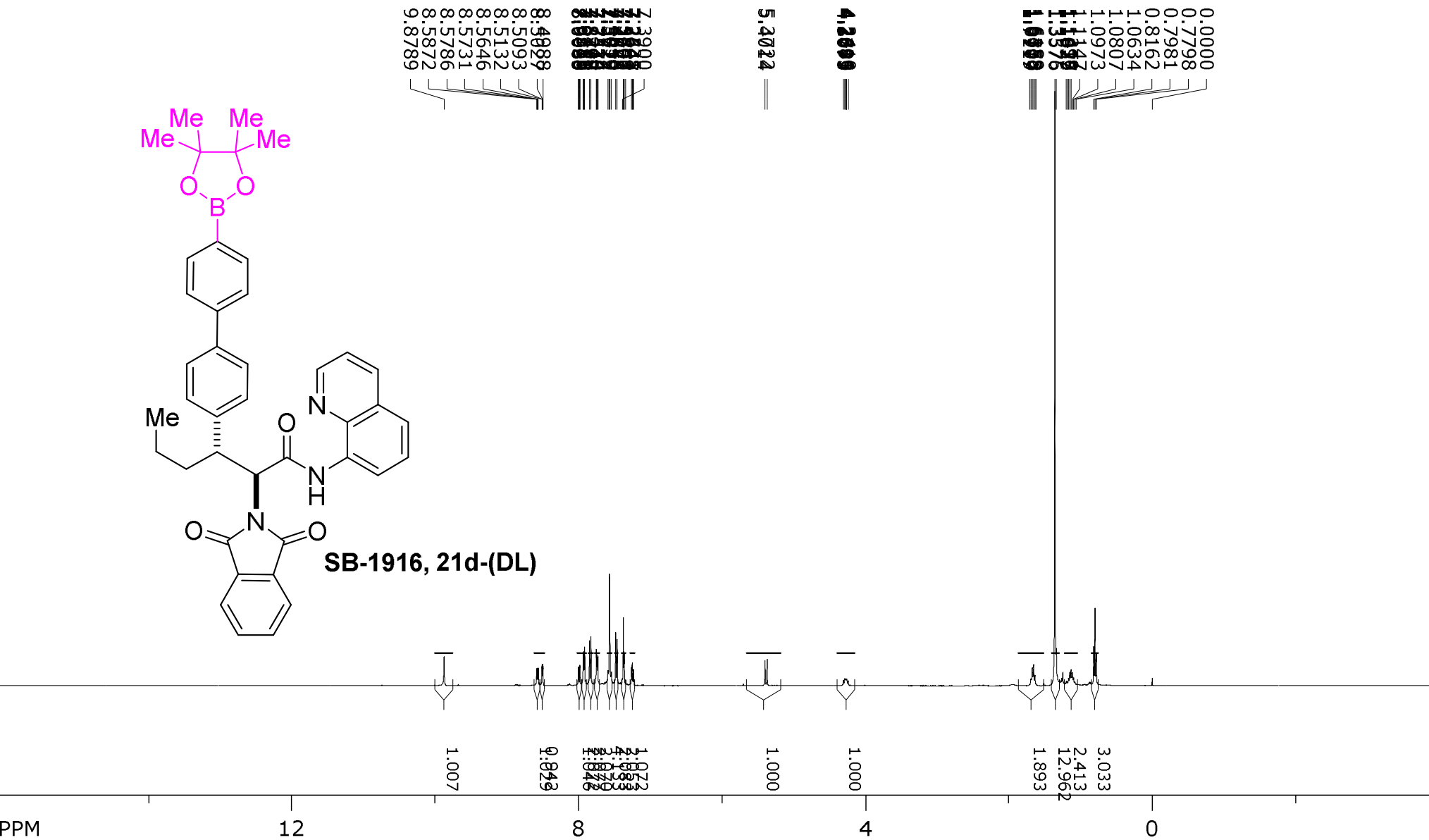


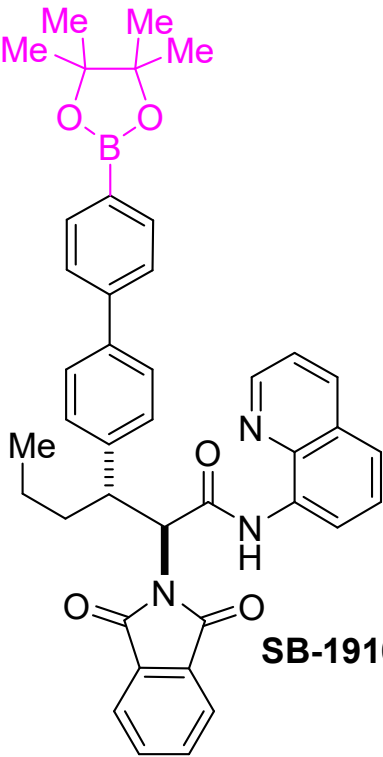




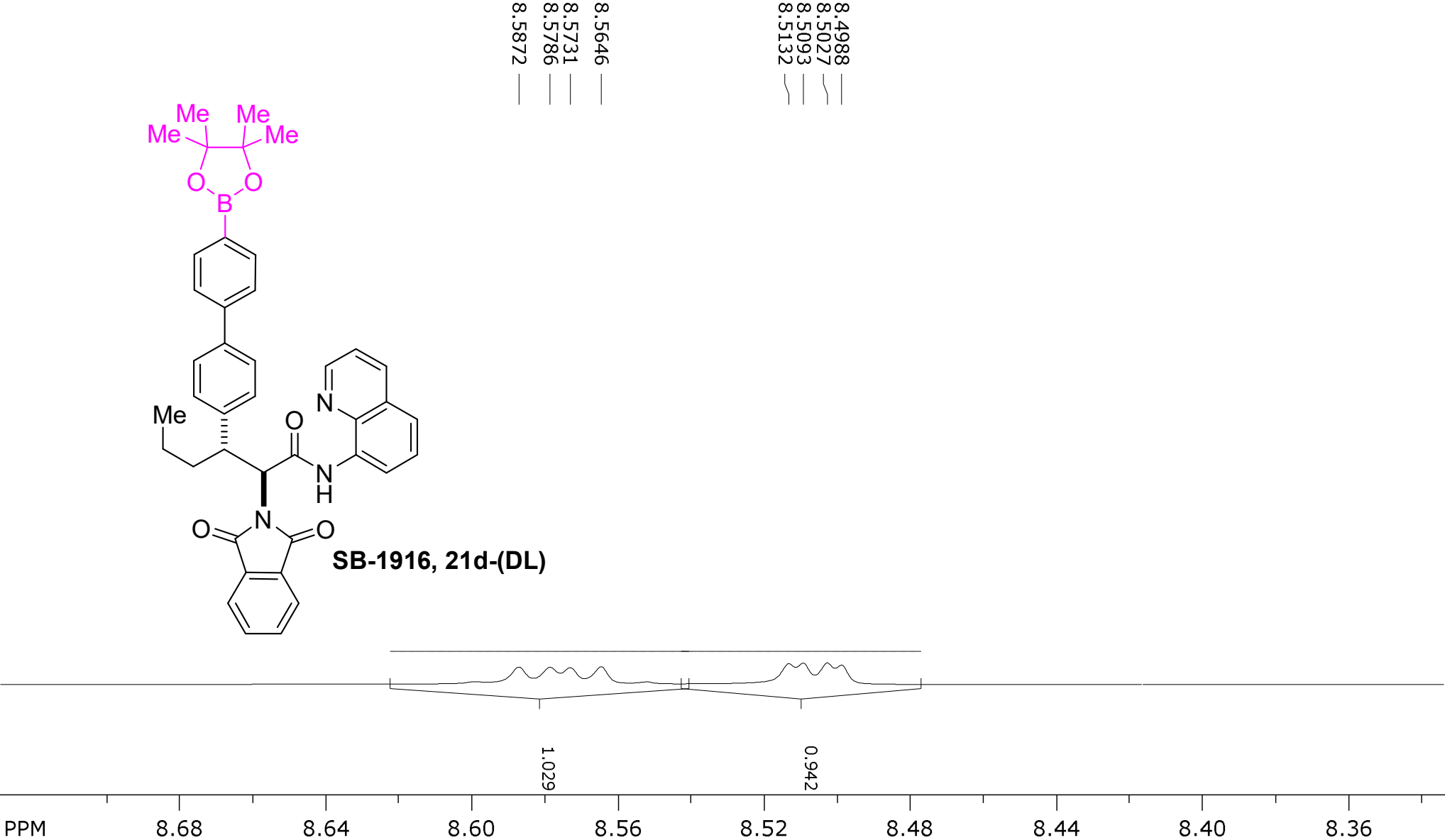


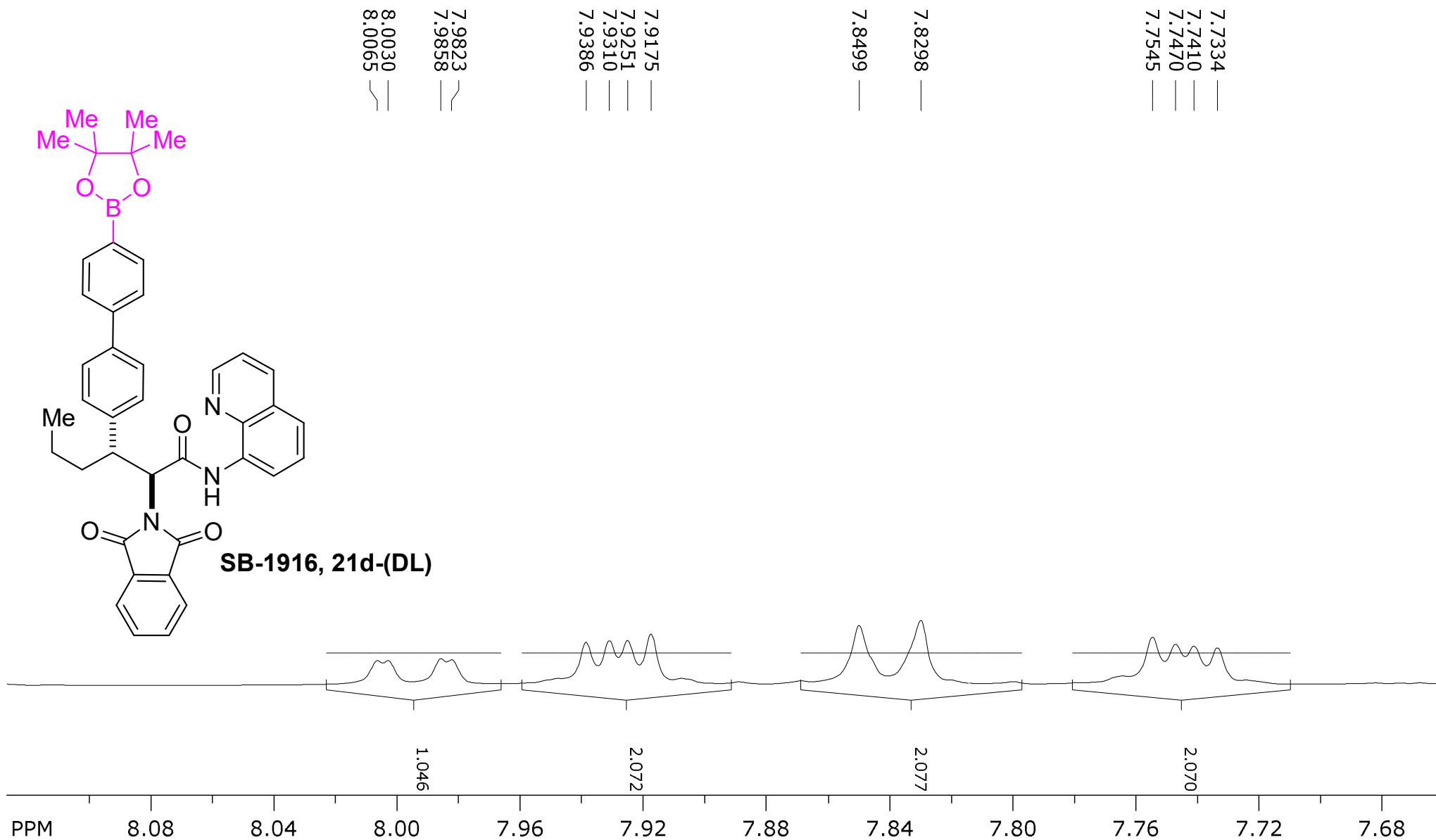


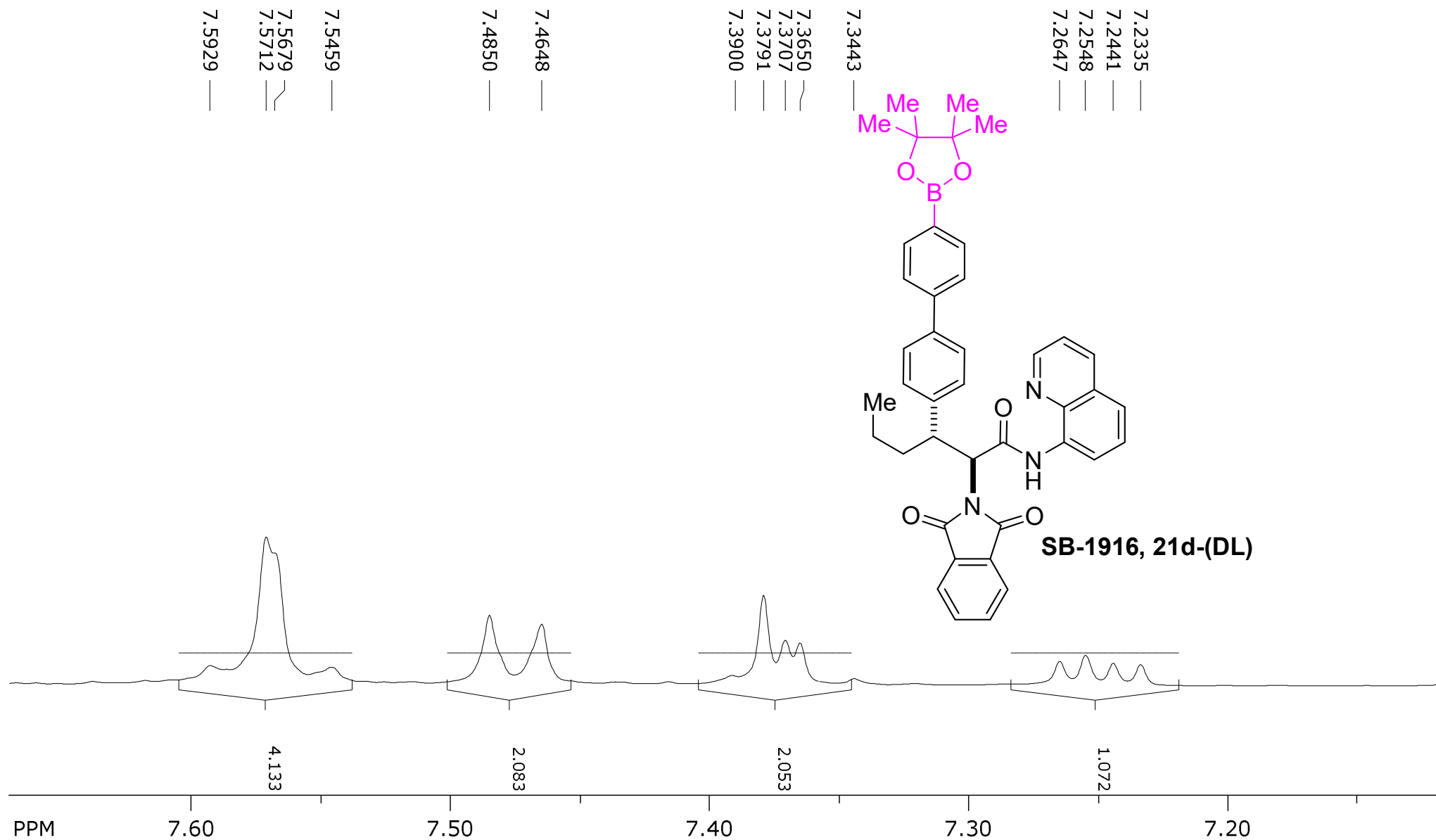


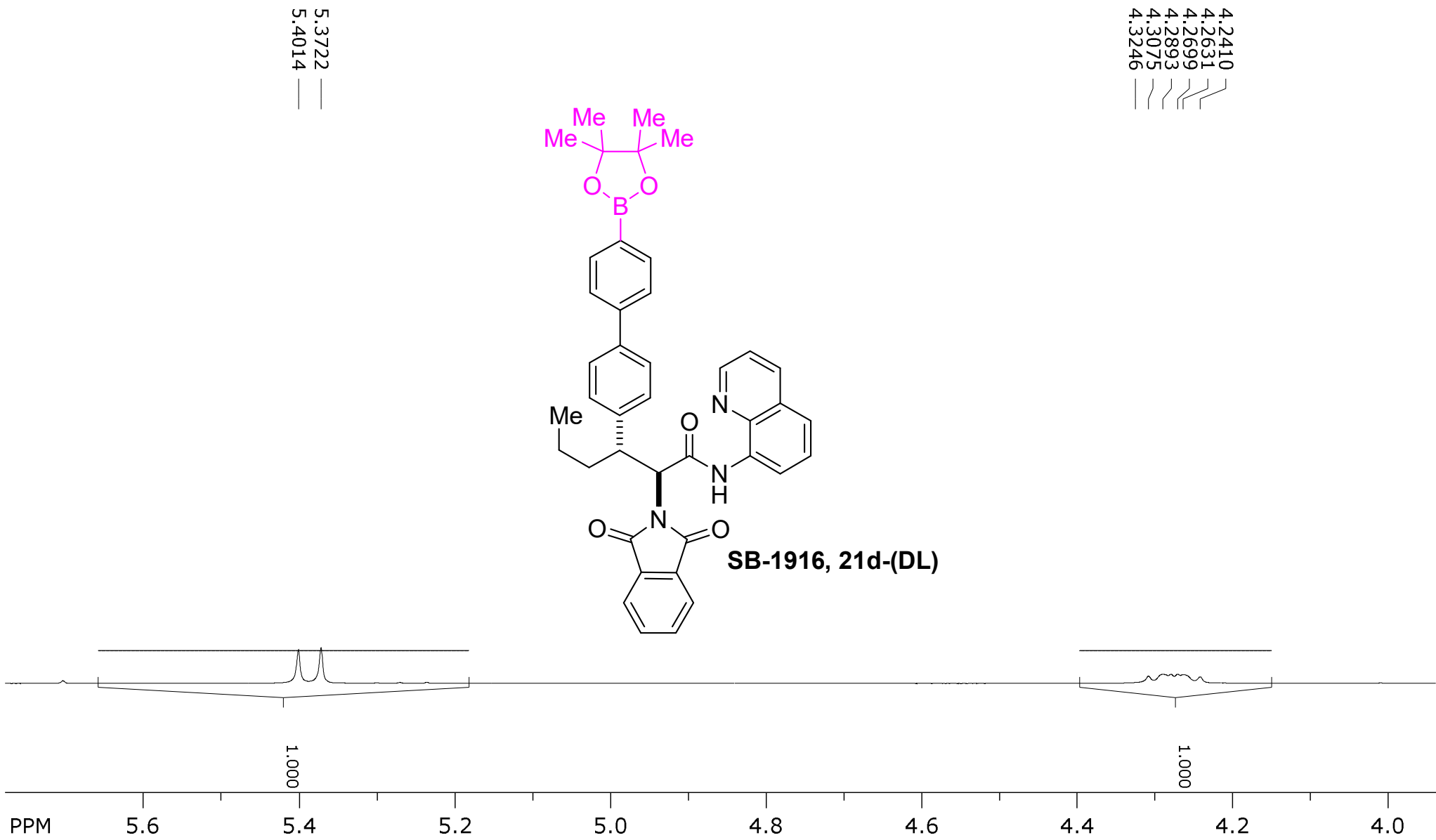


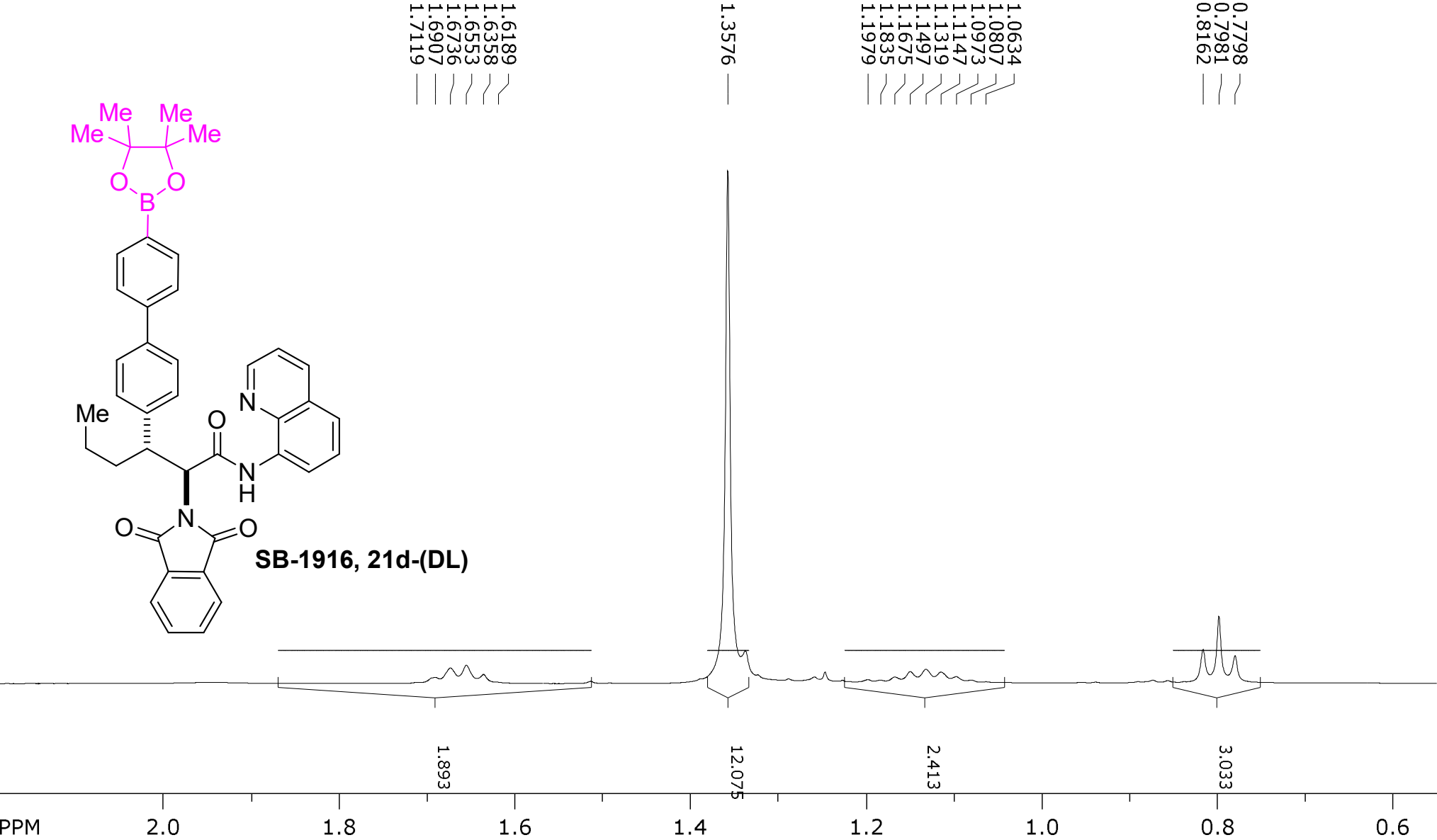
SB-1916, 21d-(DL)

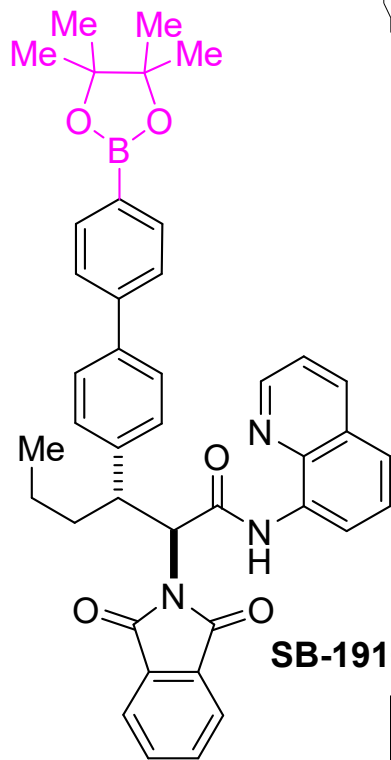




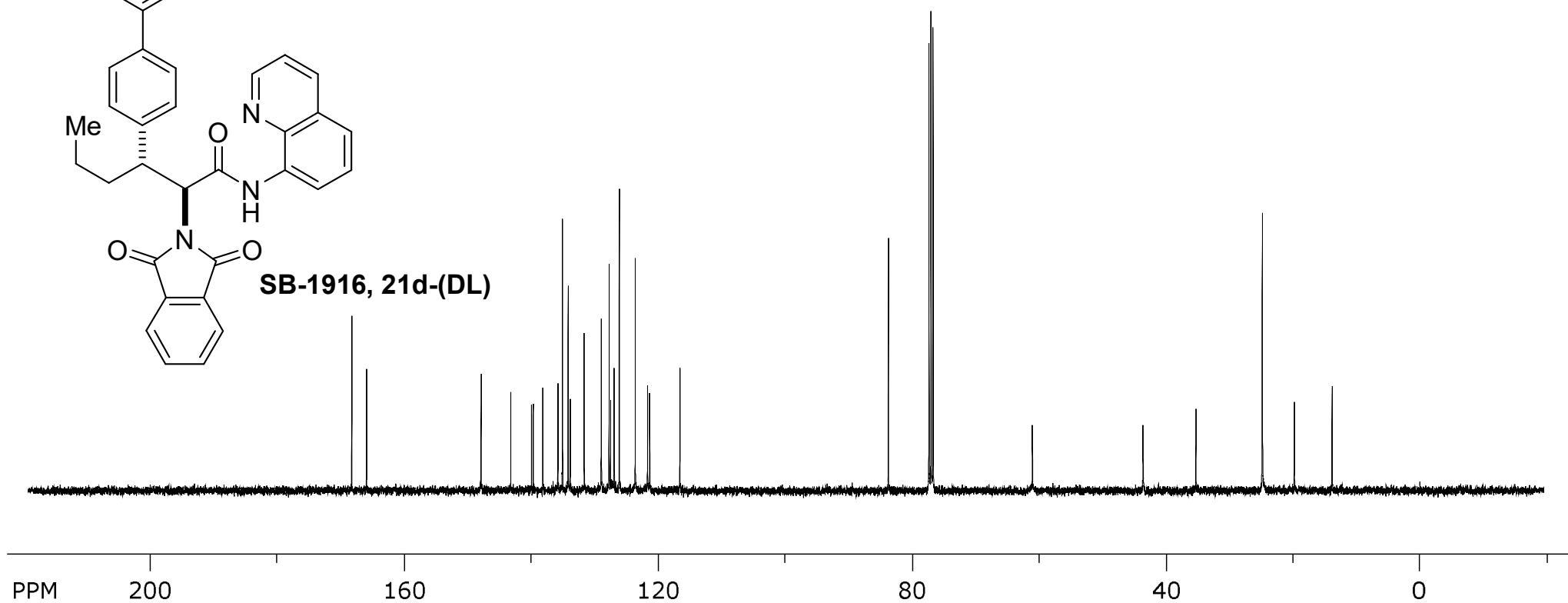


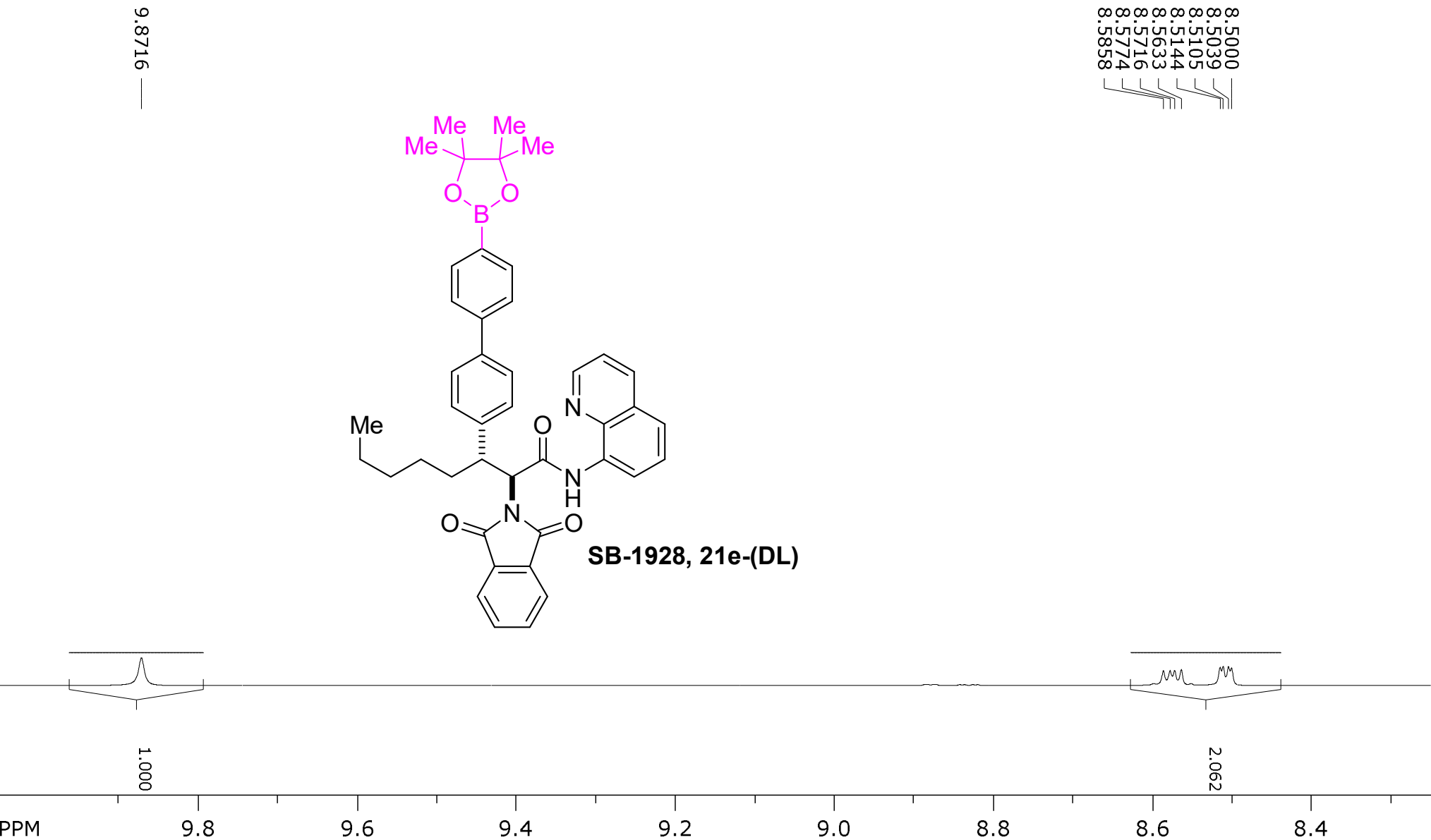


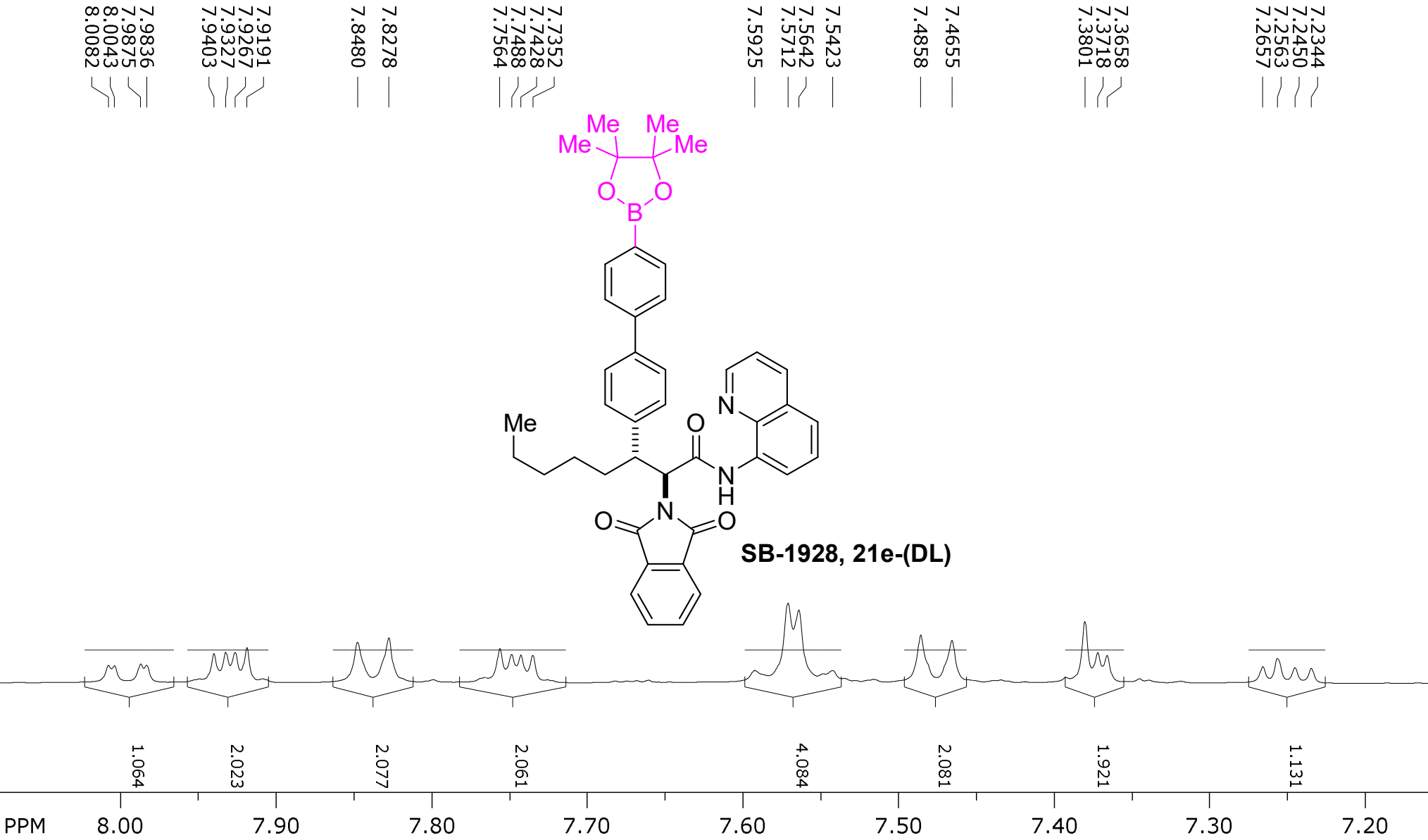




SB-1916, 21d-(DL)

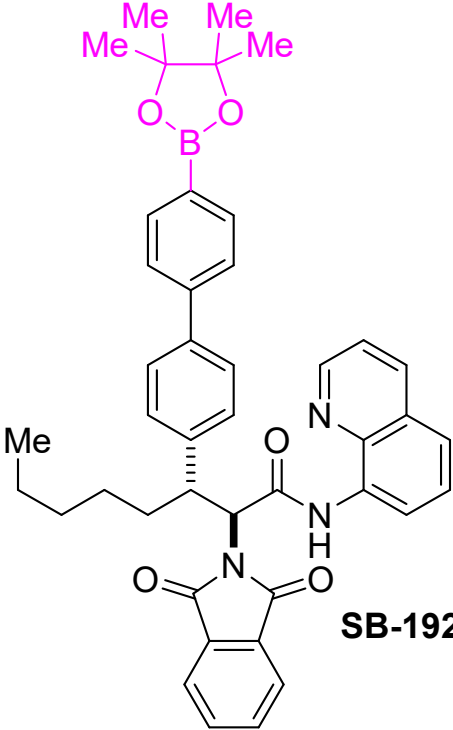






5.3633
5.3925

4.2227
4.2418
4.2518
4.2598
4.2702
4.2886

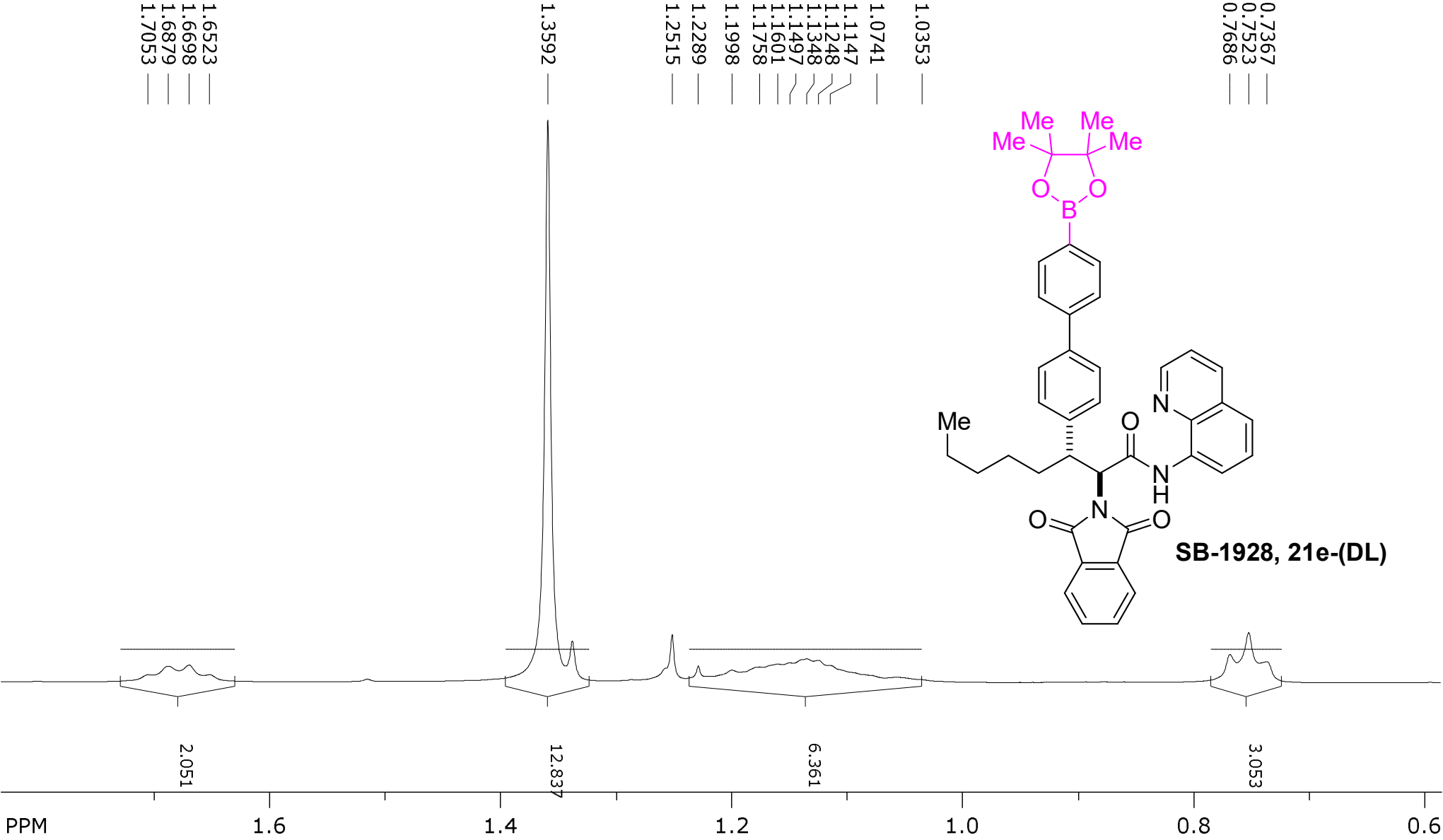


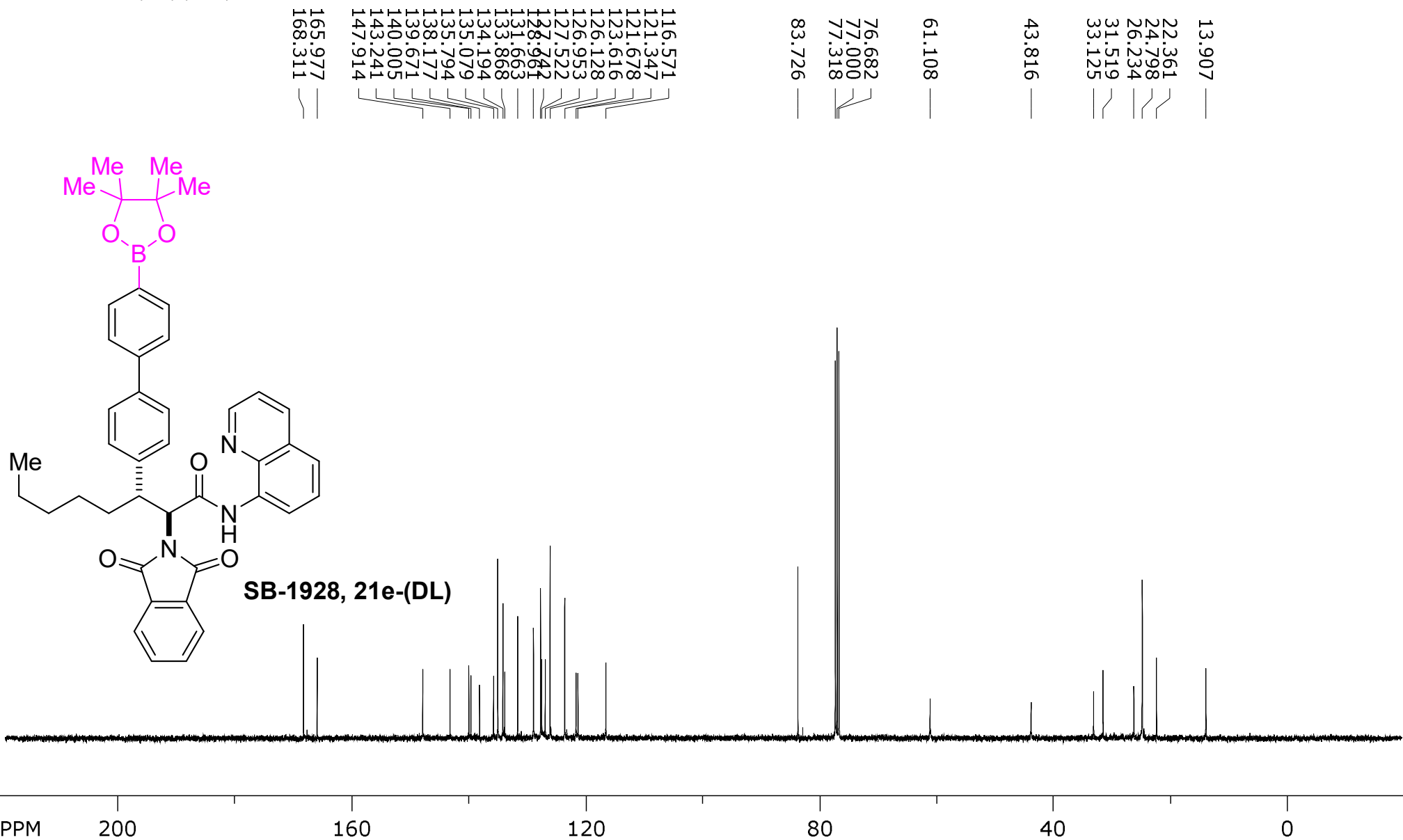
SB-1928, 21e-(DL)

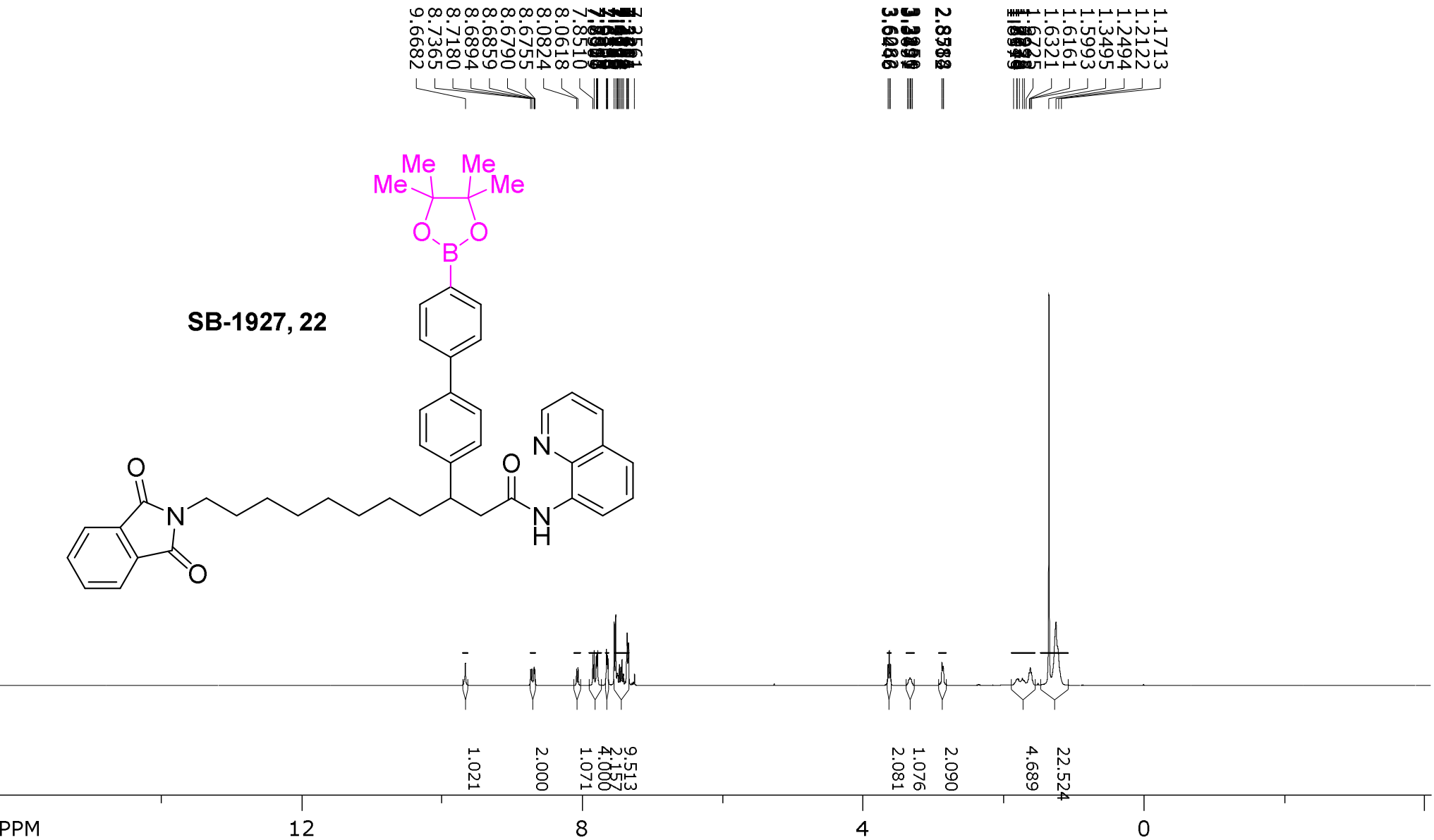
1.041

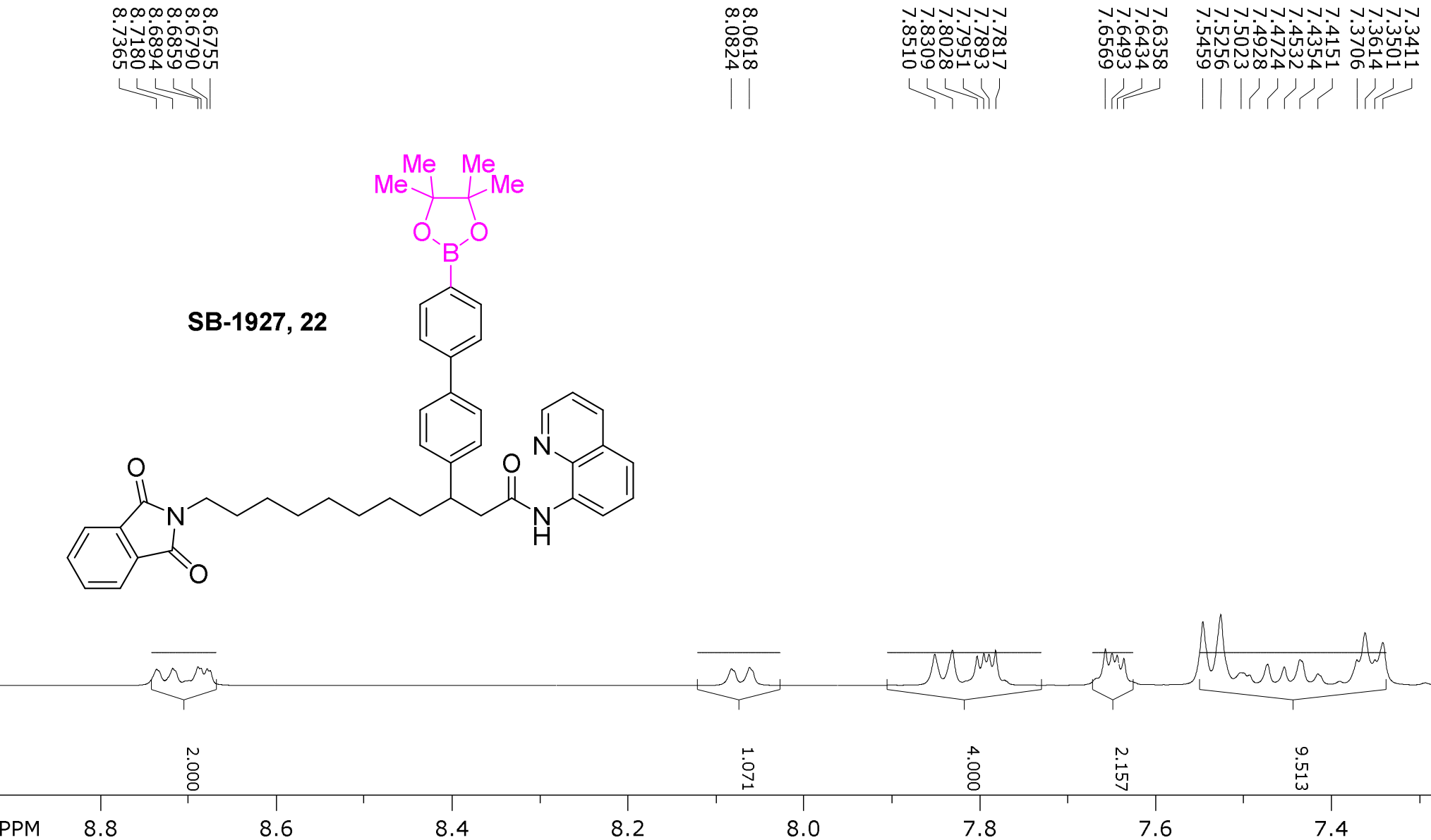
1.055

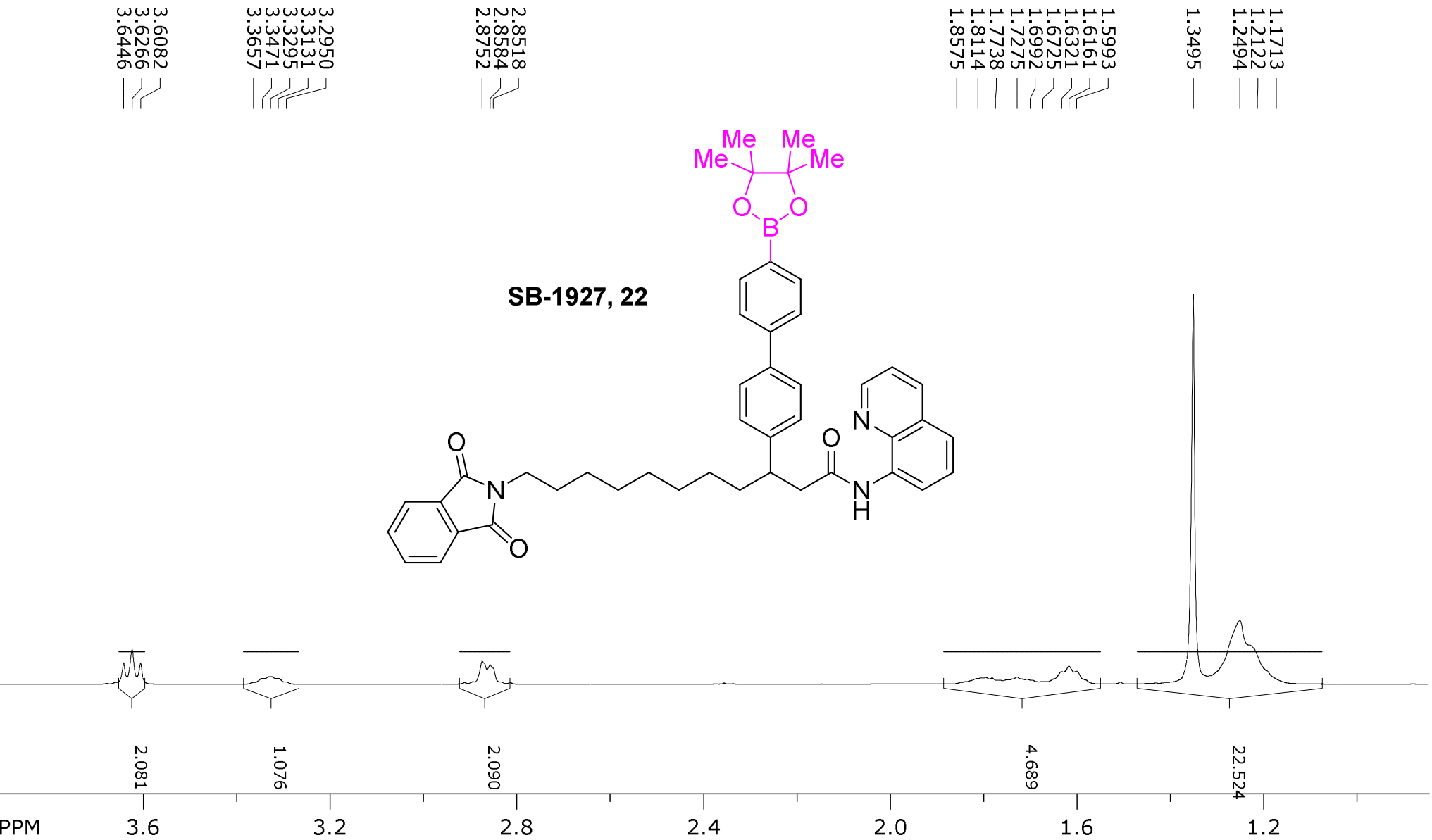
PPM 5.6 5.2 4.8 4.4 4.0

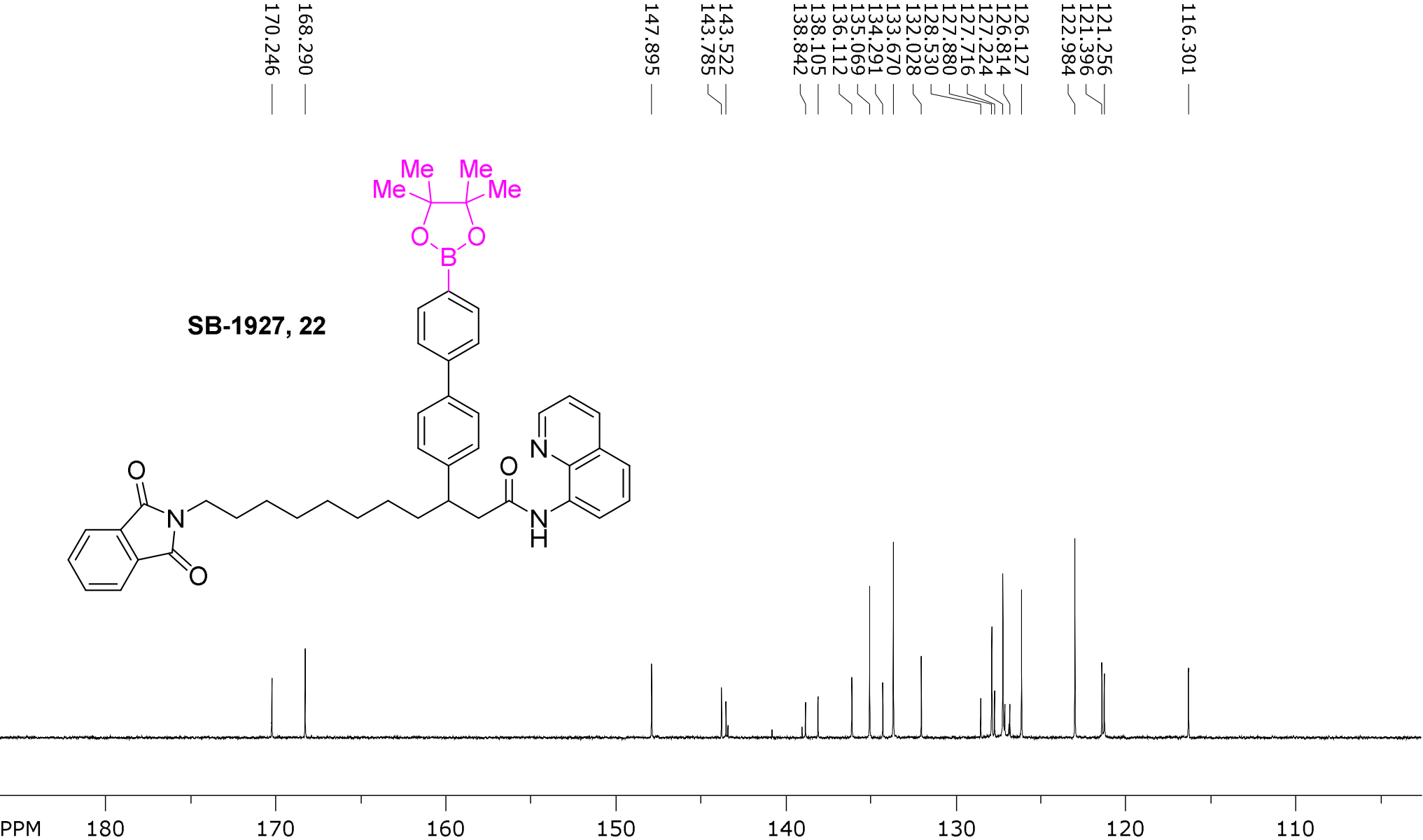


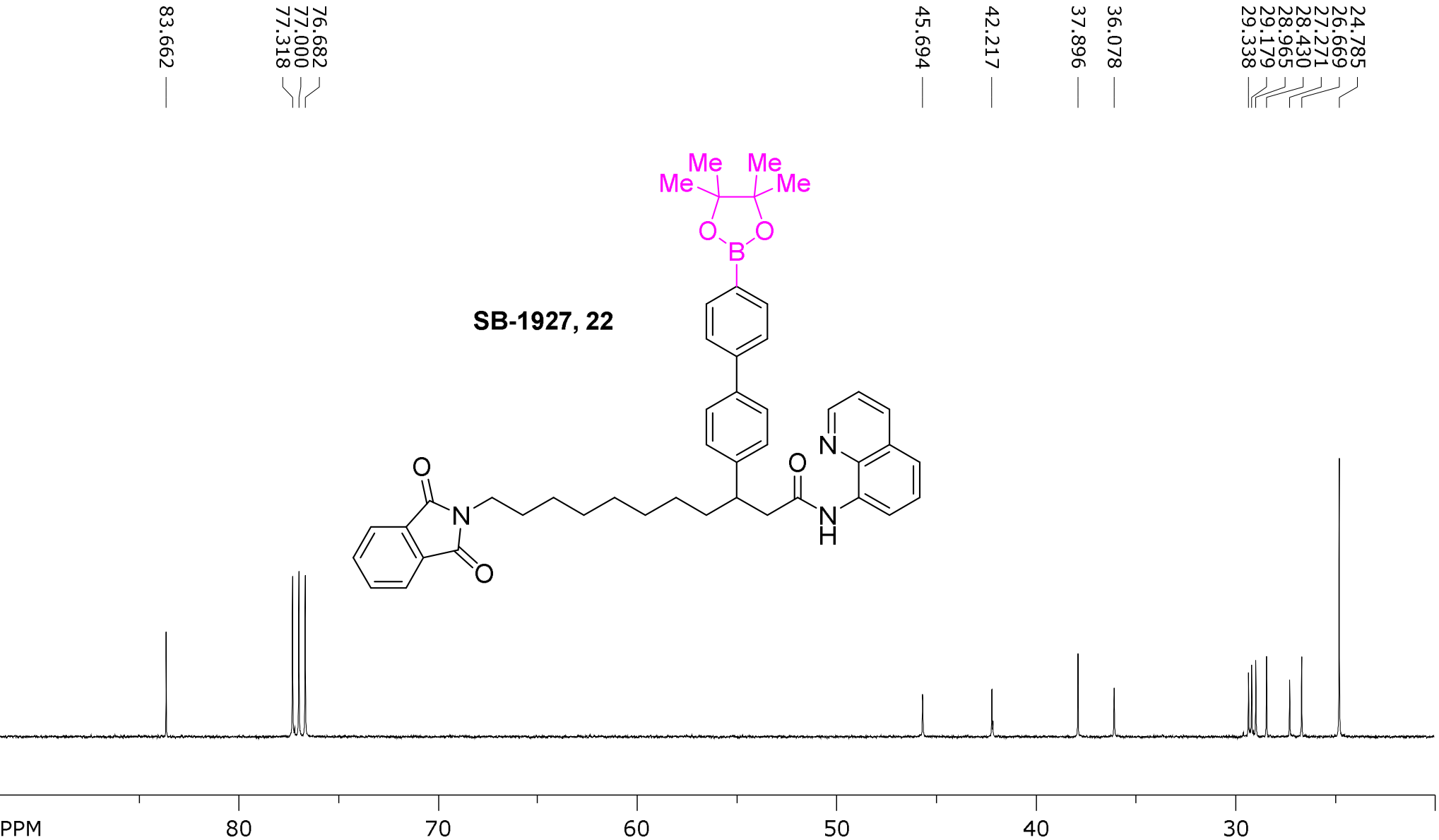


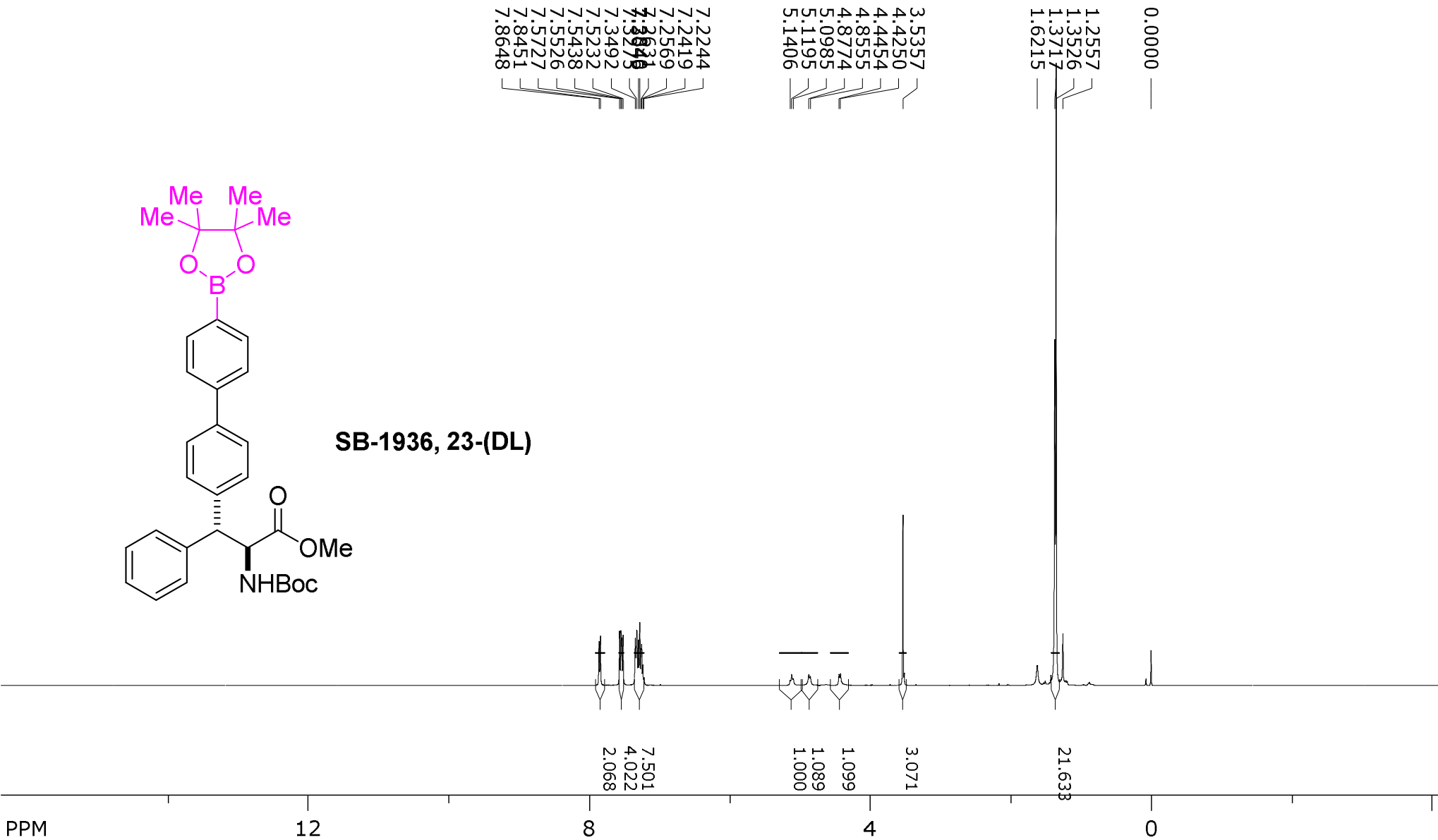


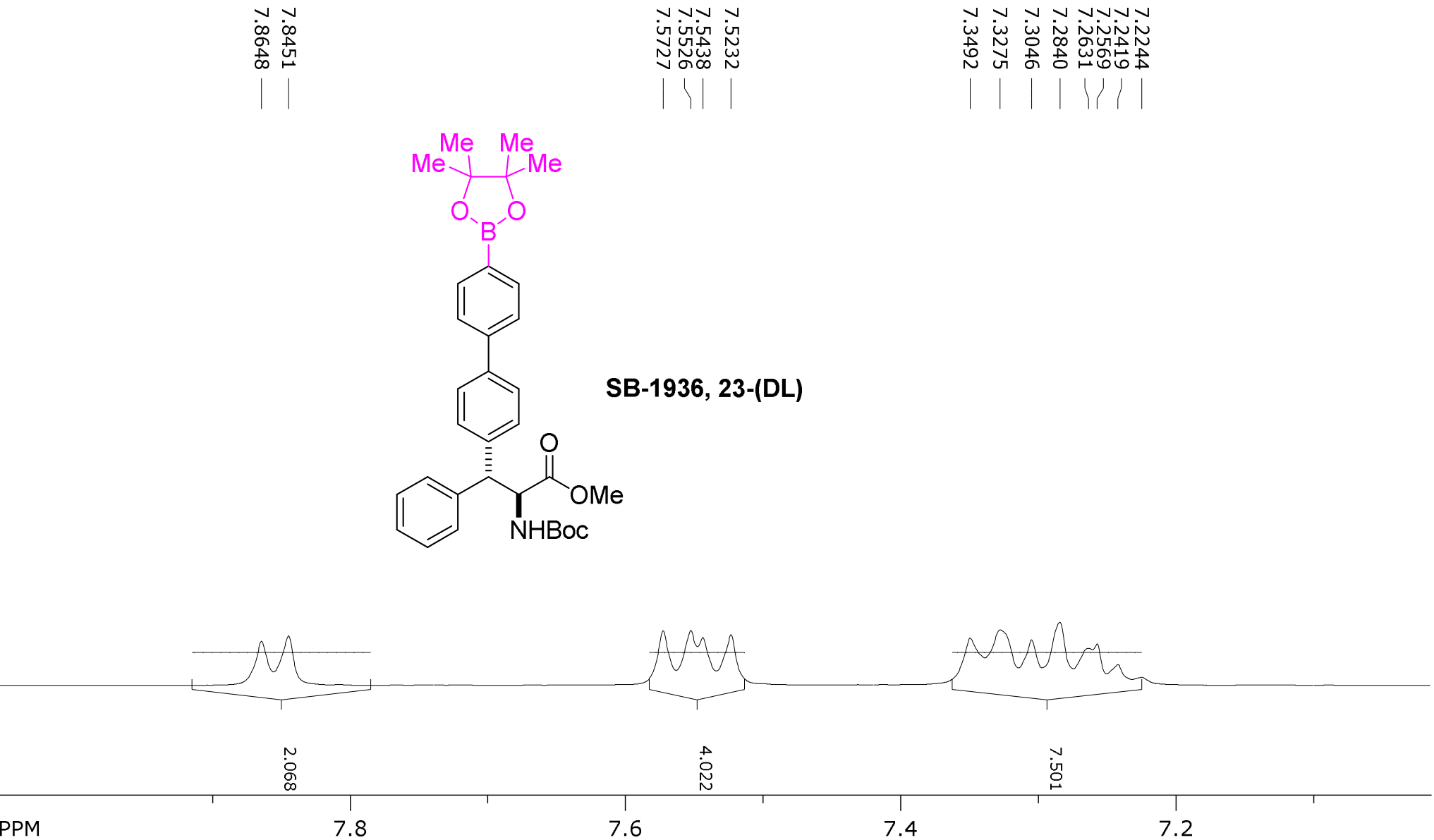


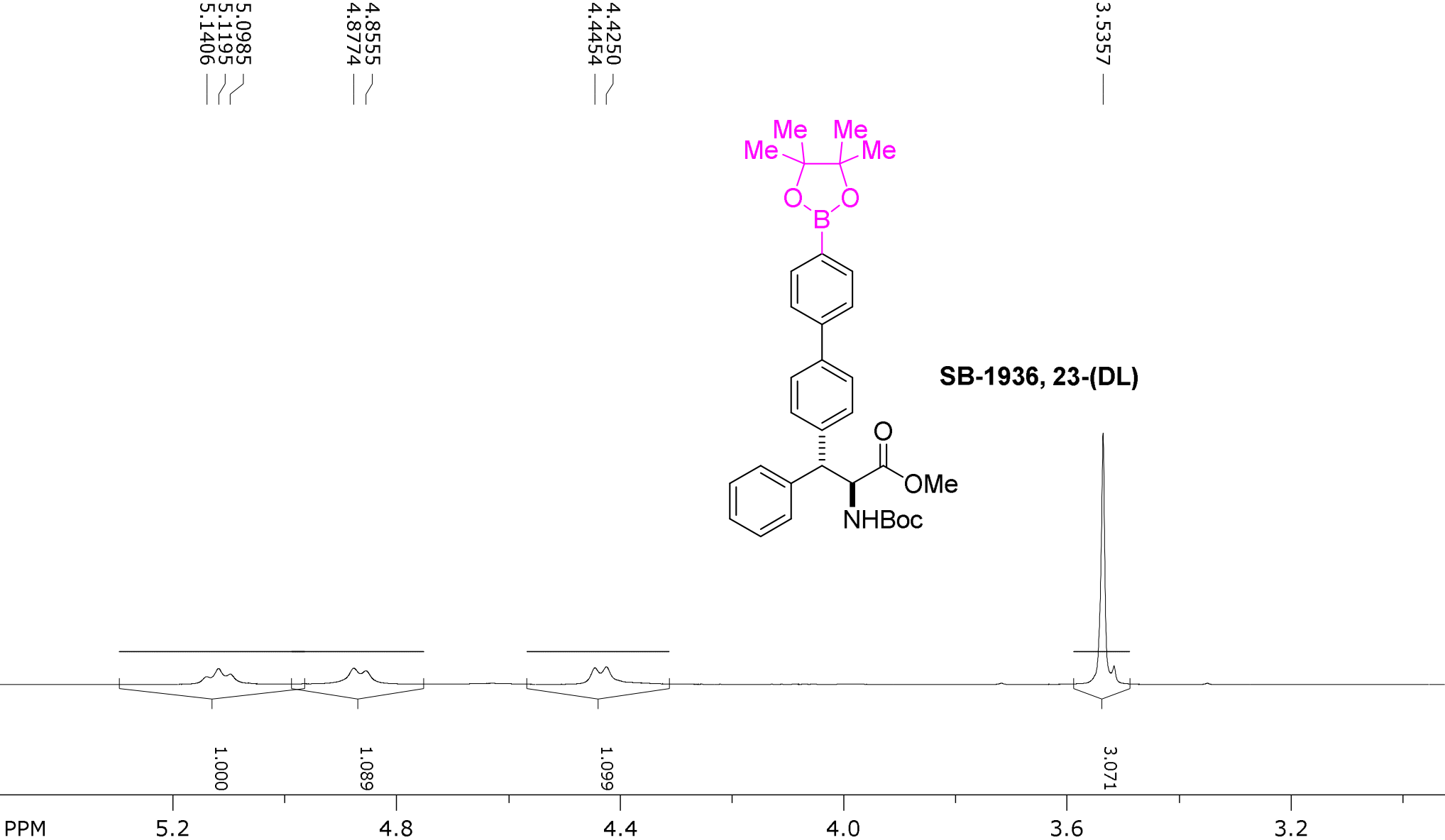


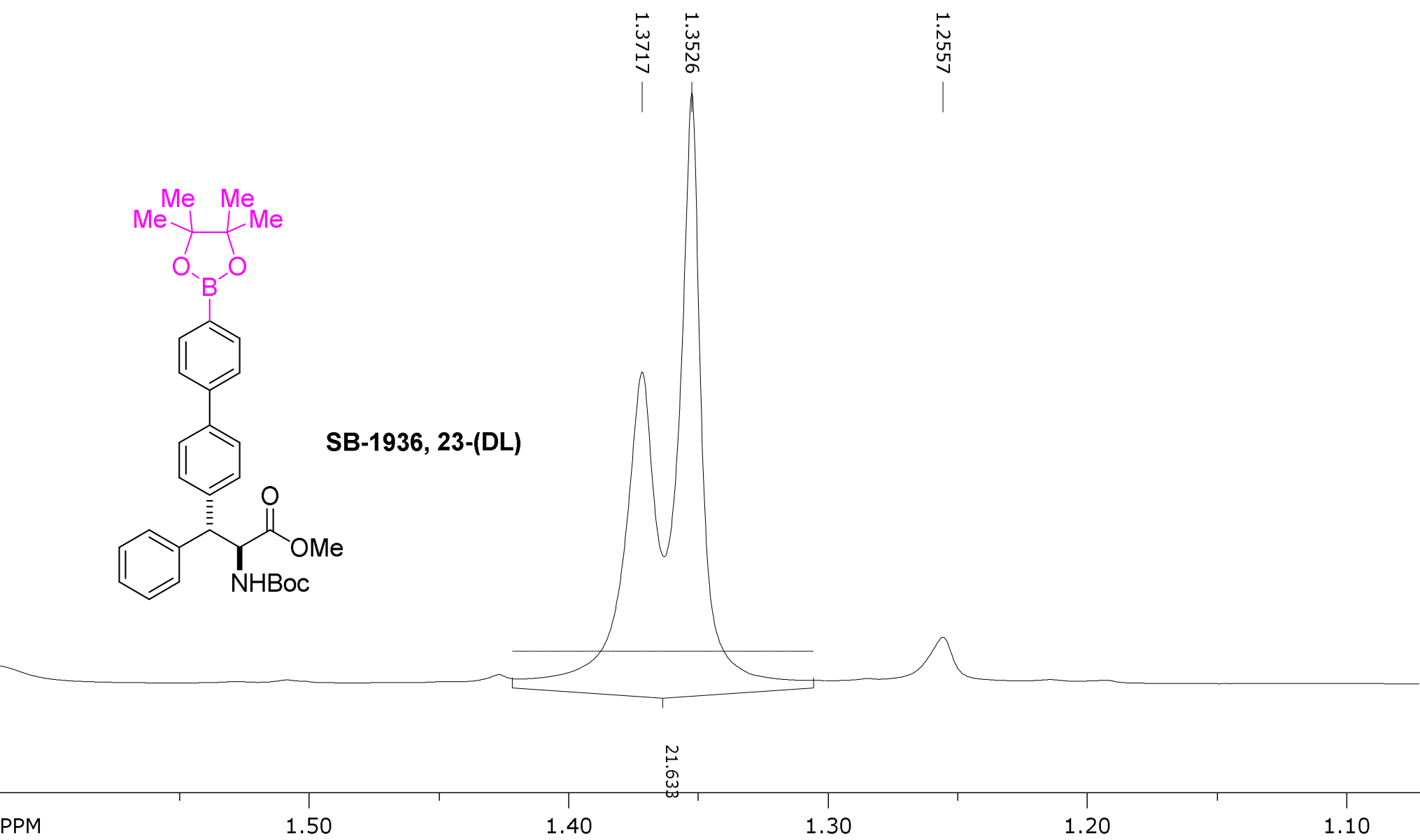


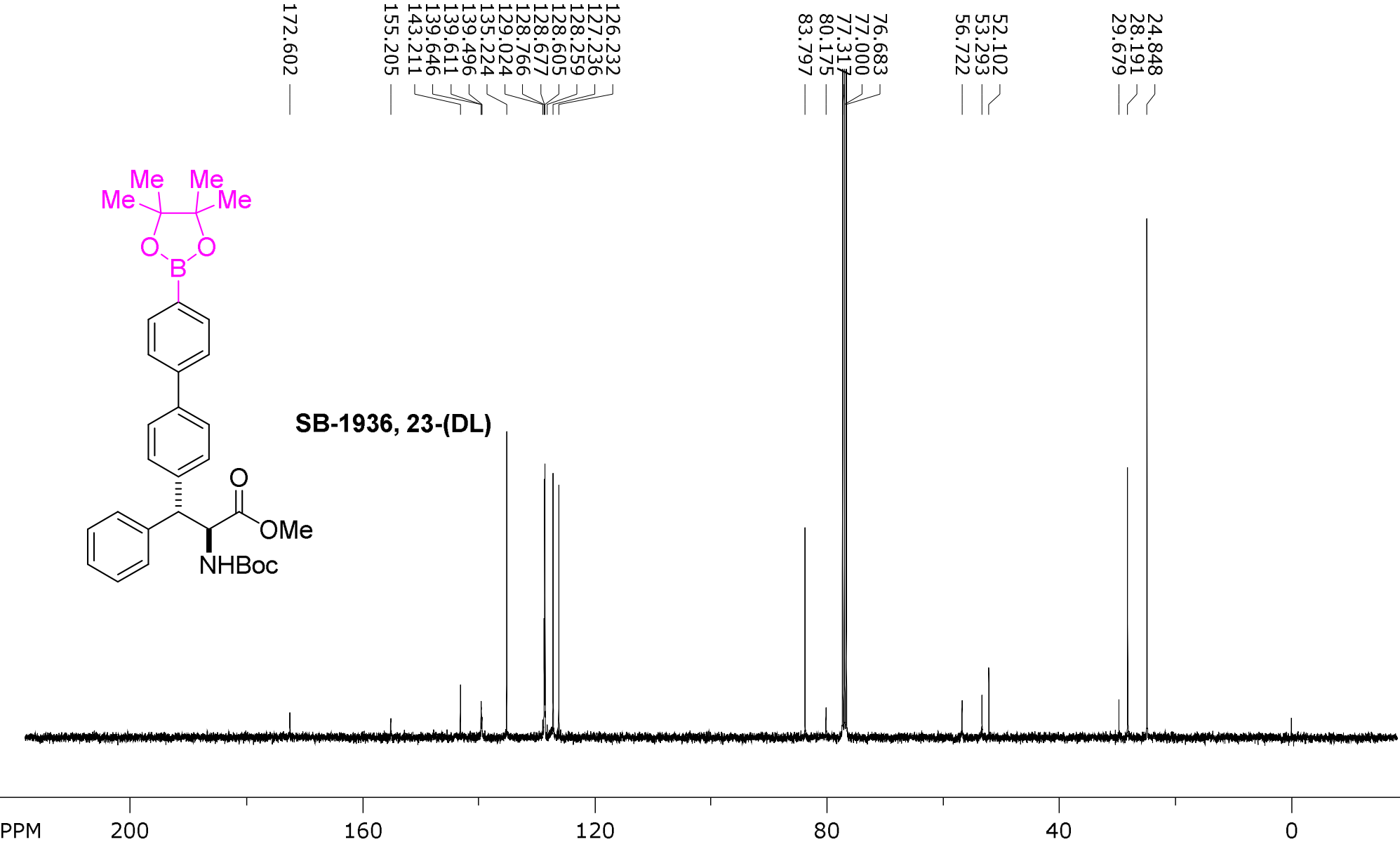


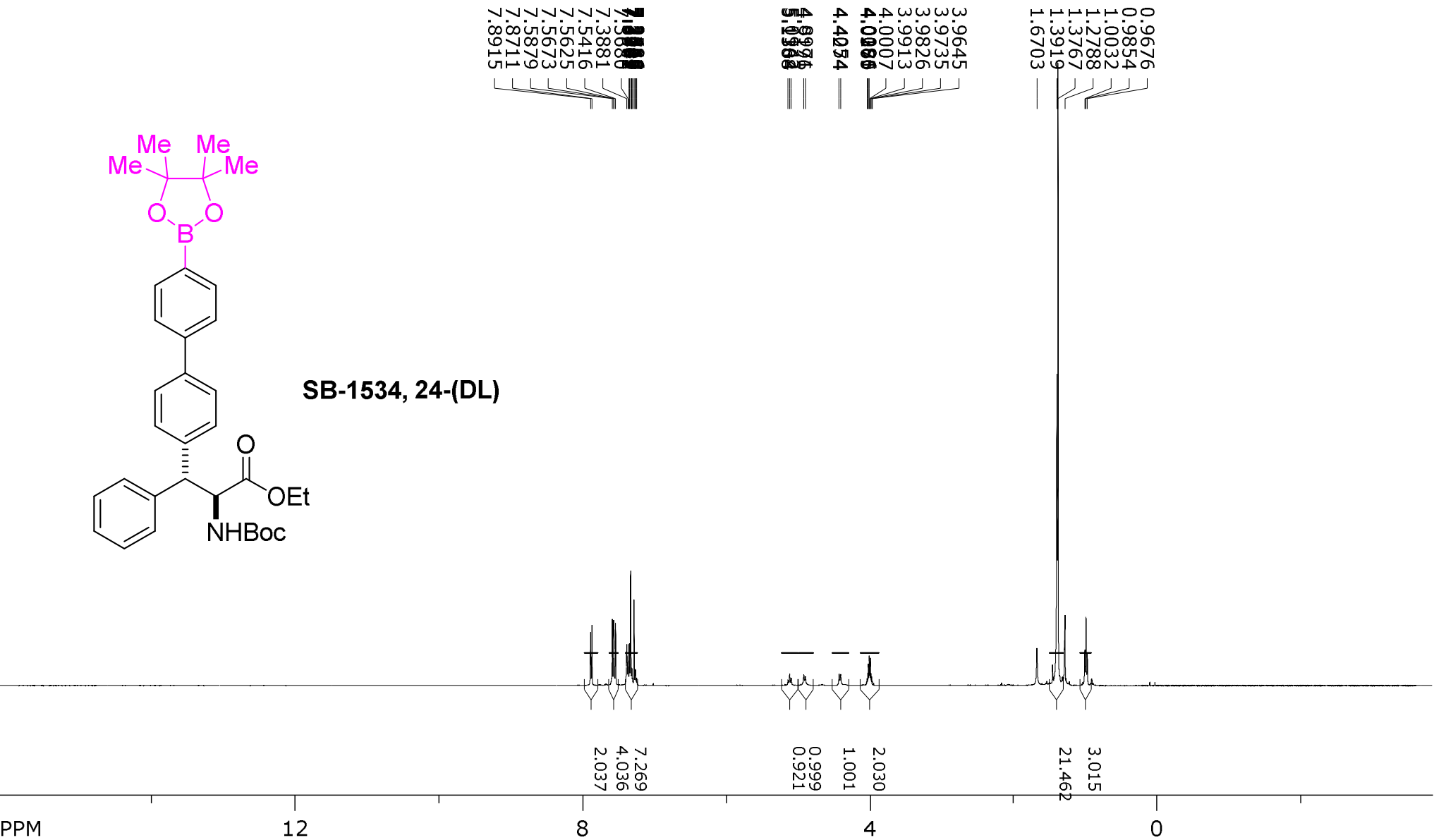


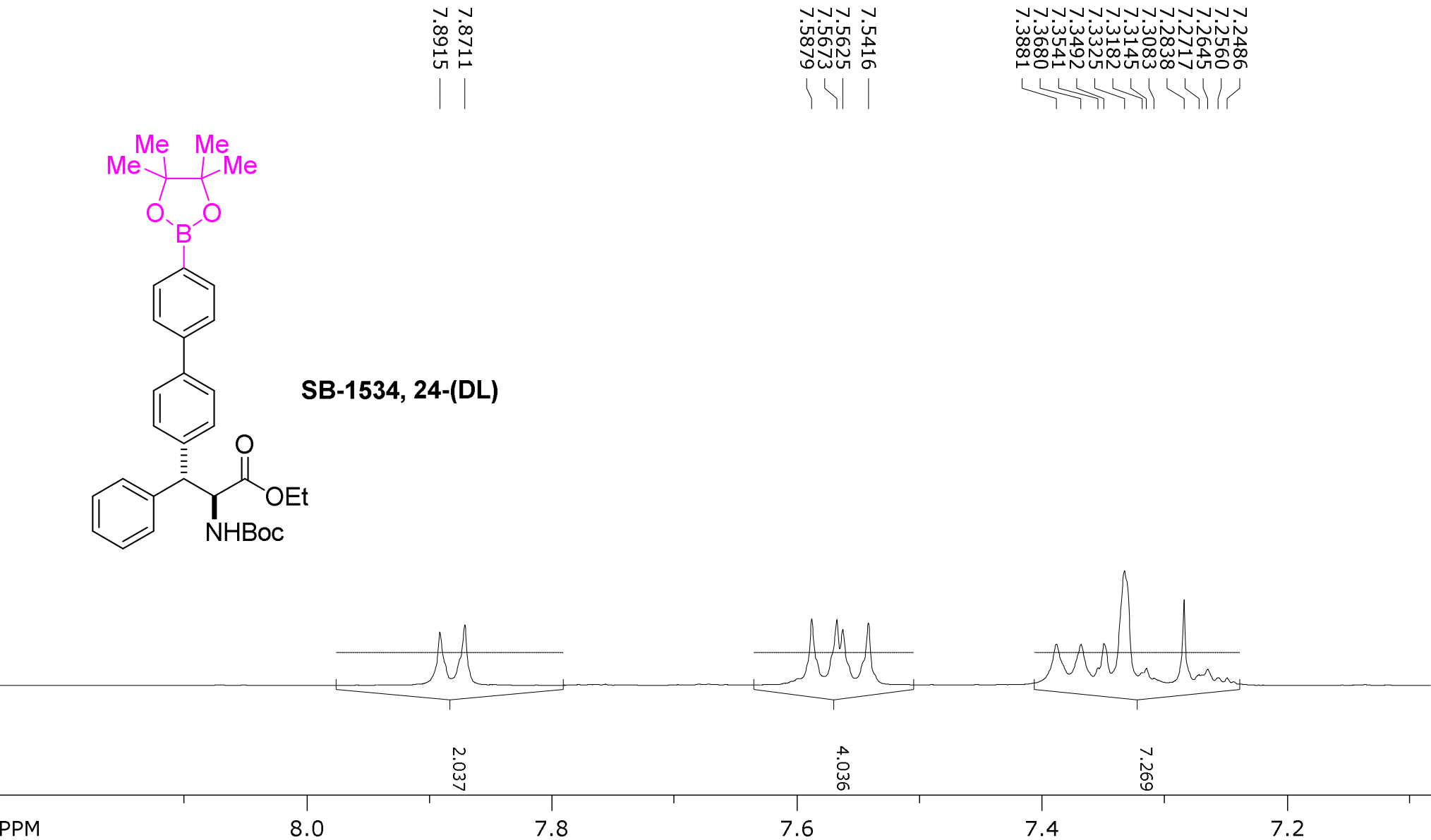


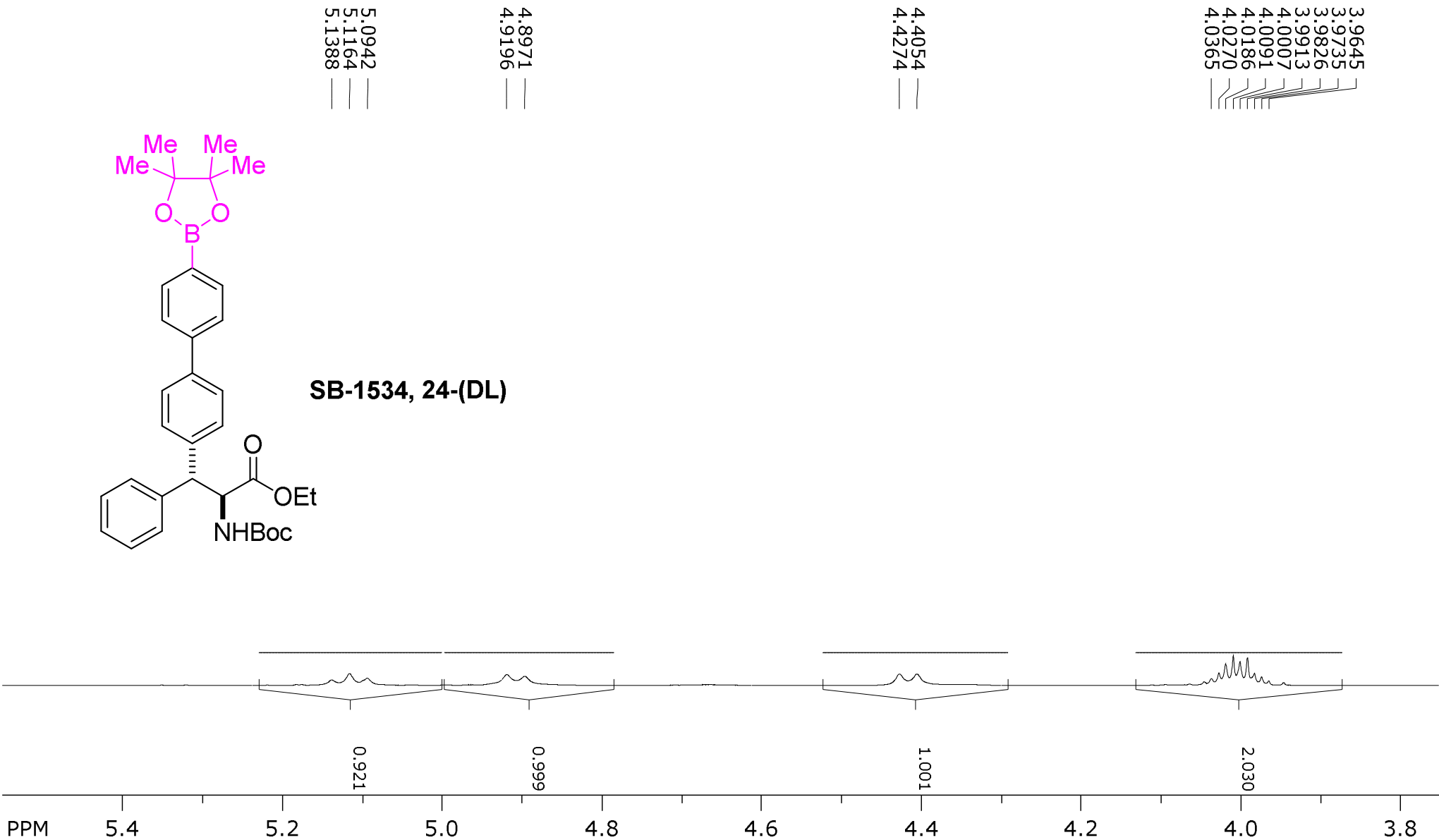


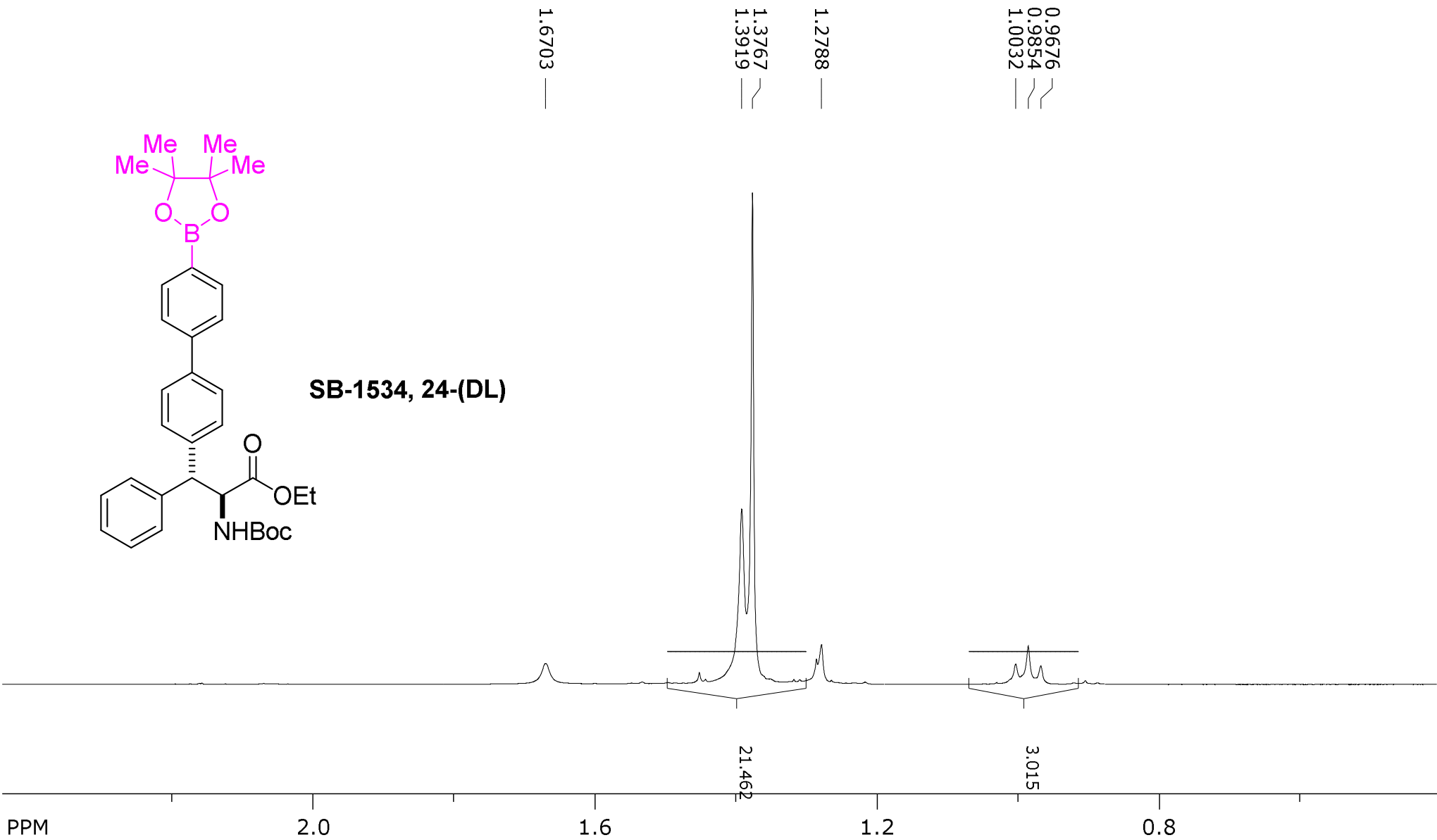


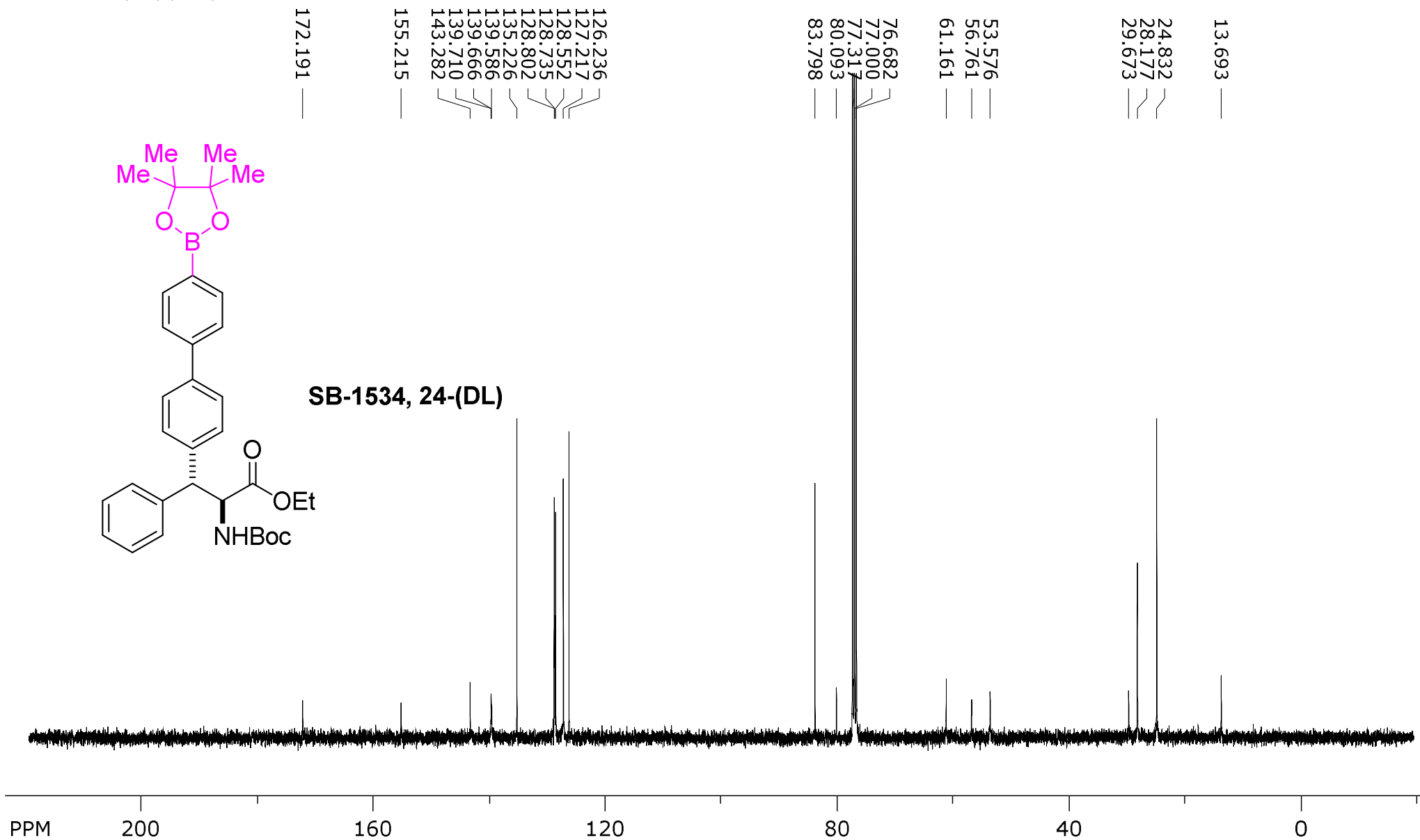


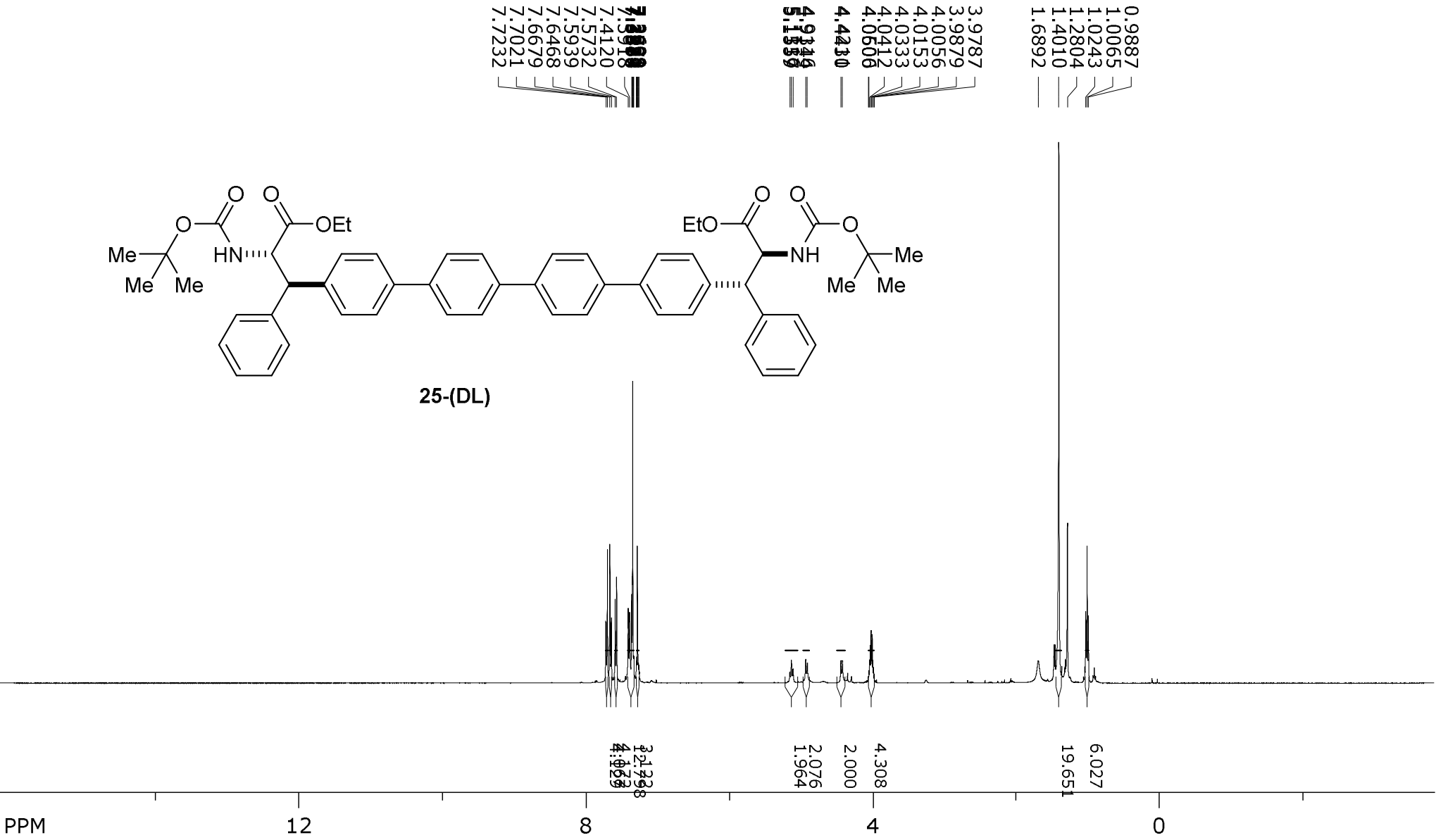


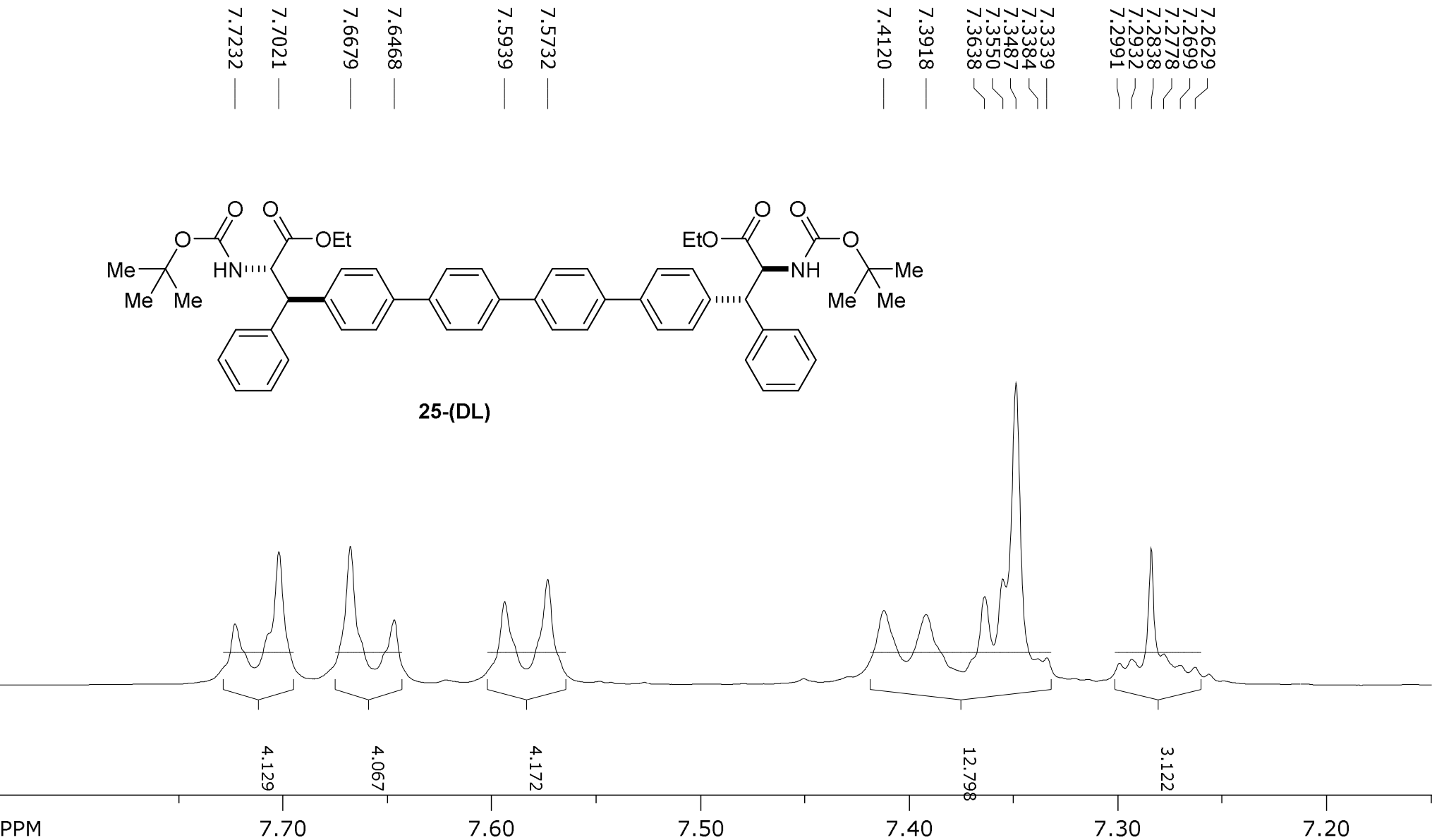


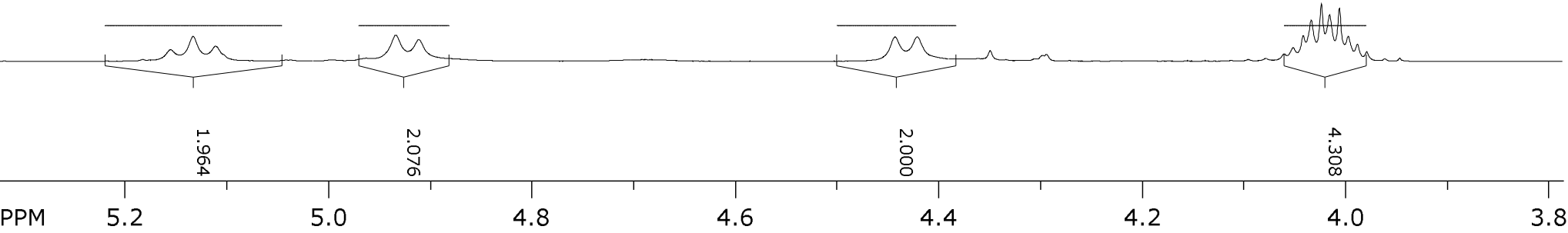


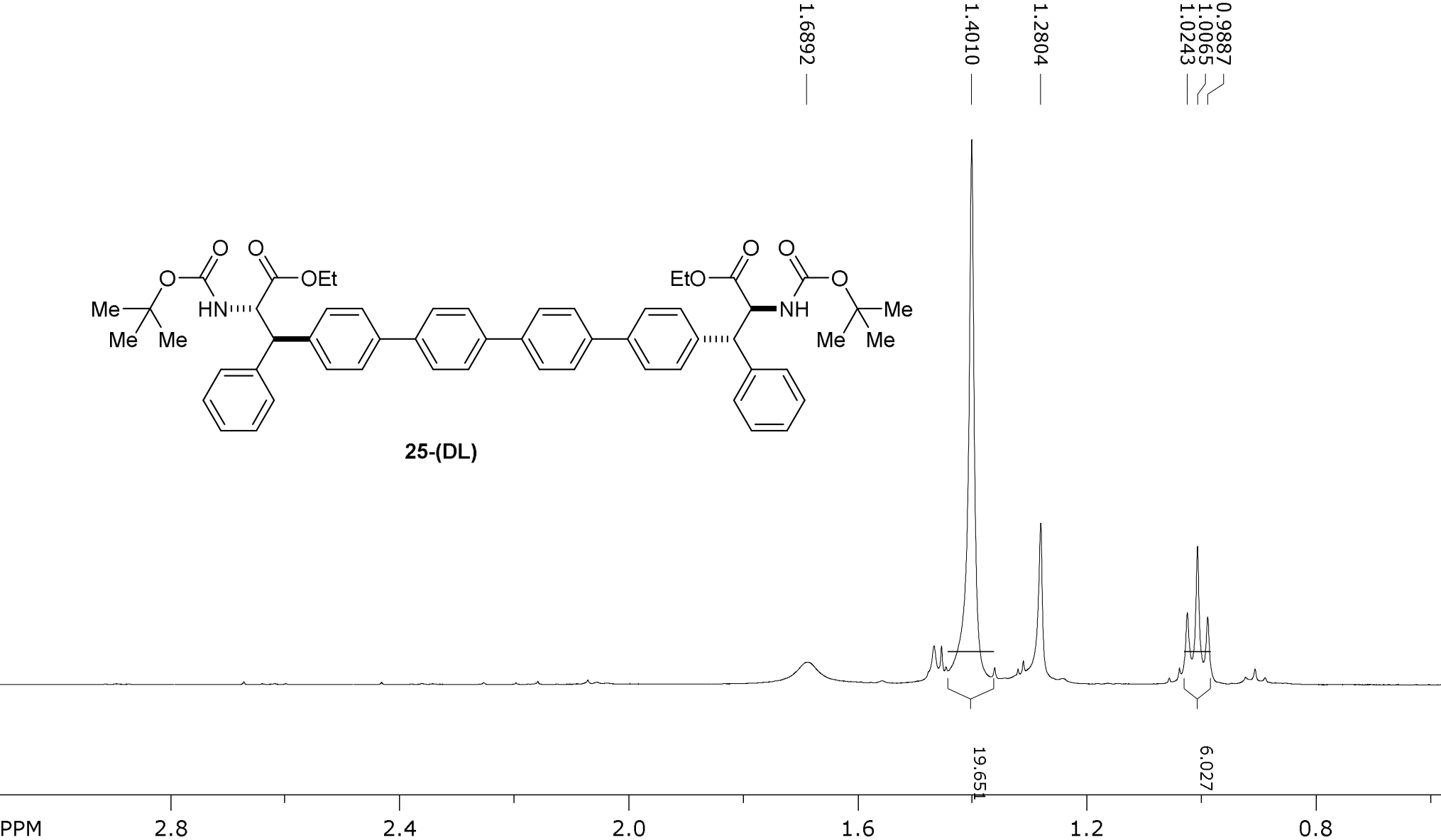


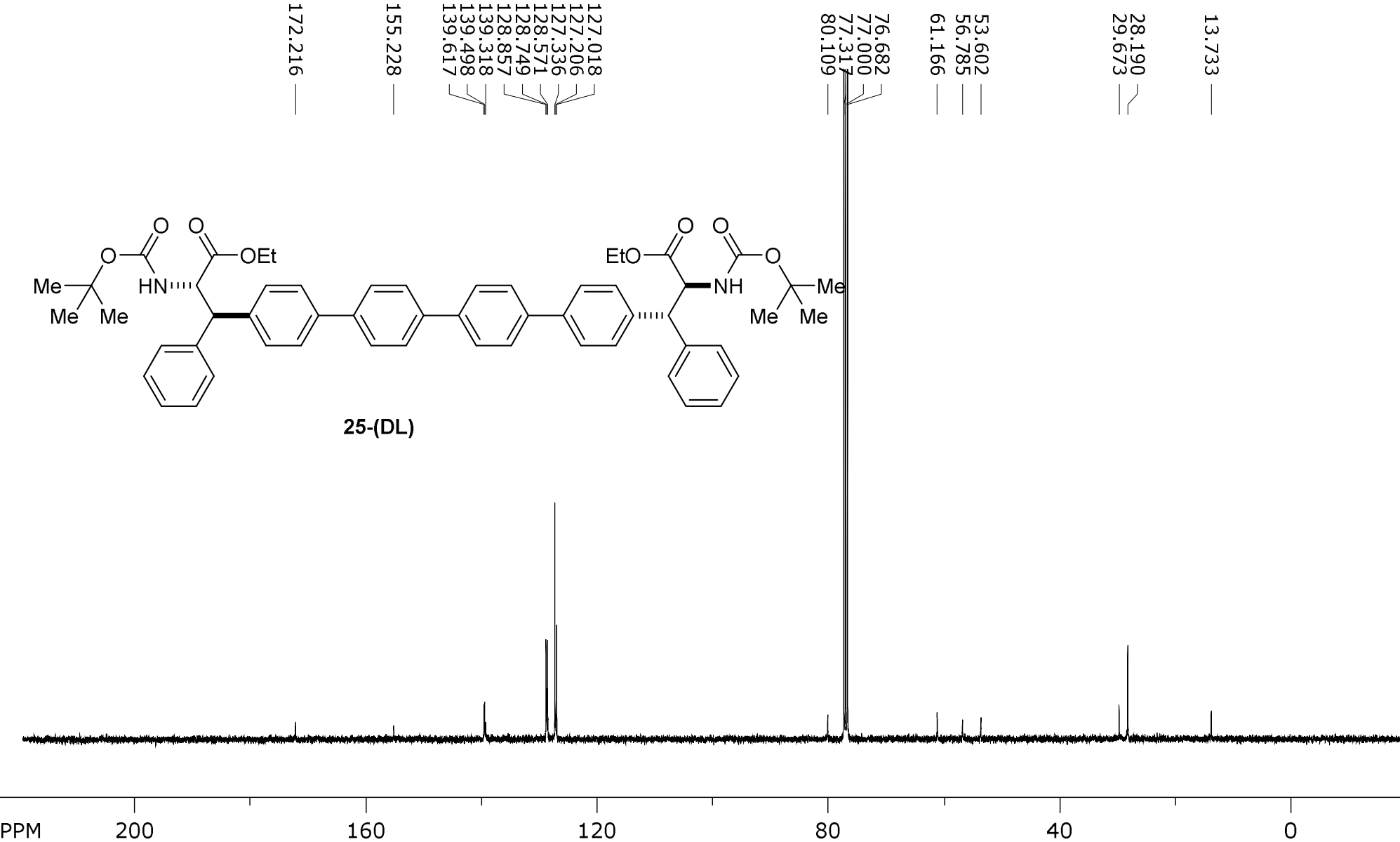


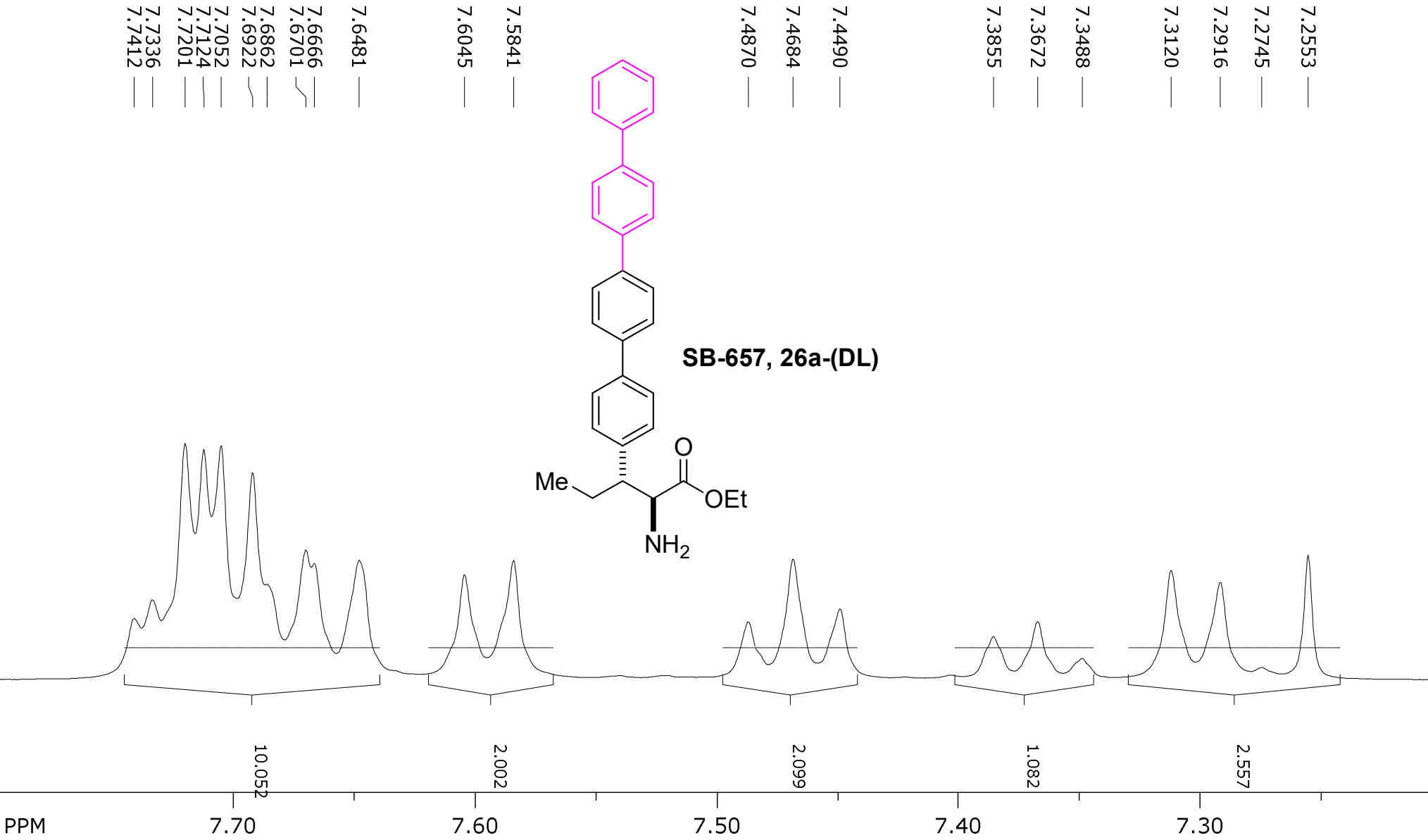


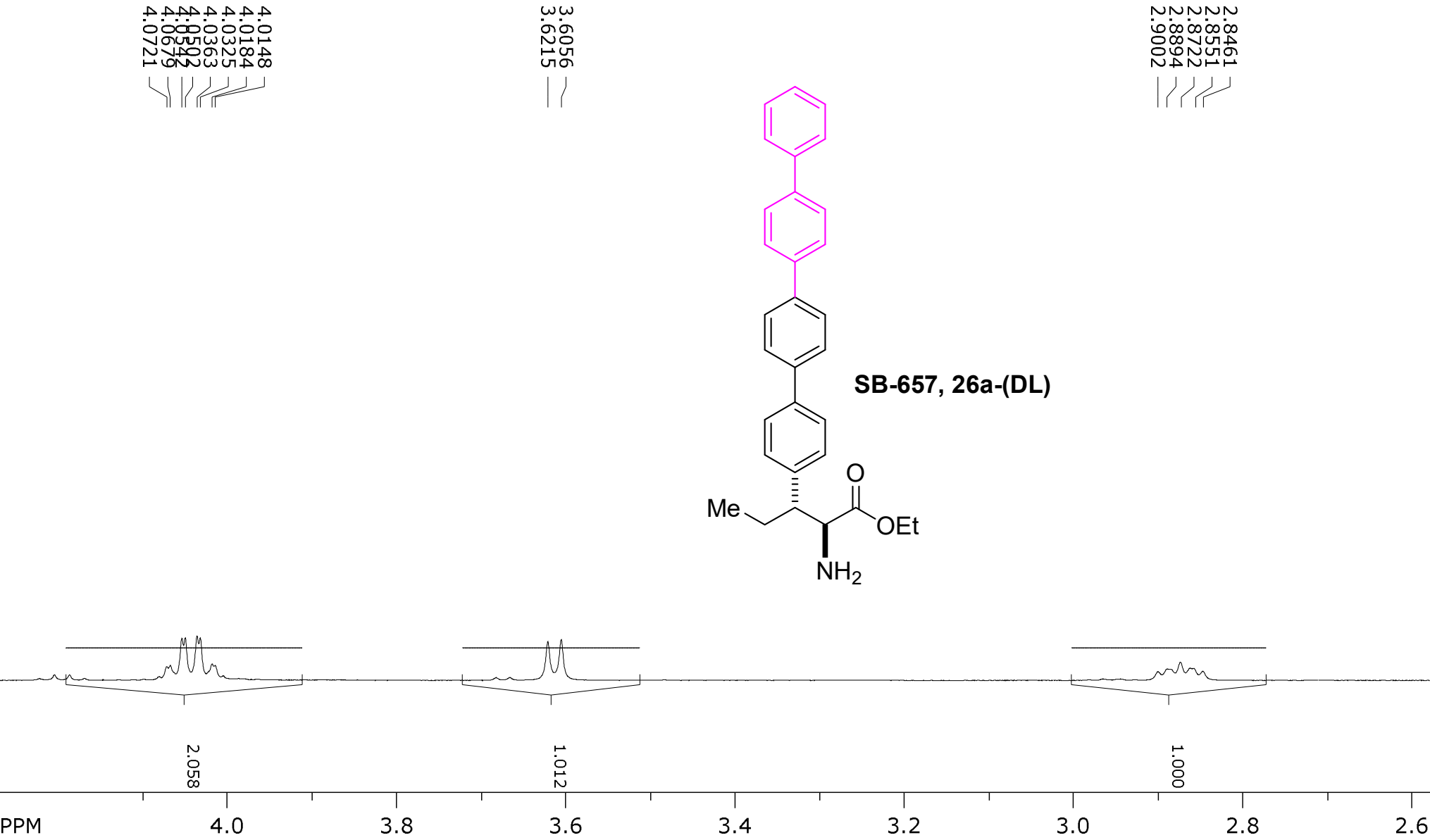


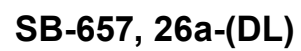


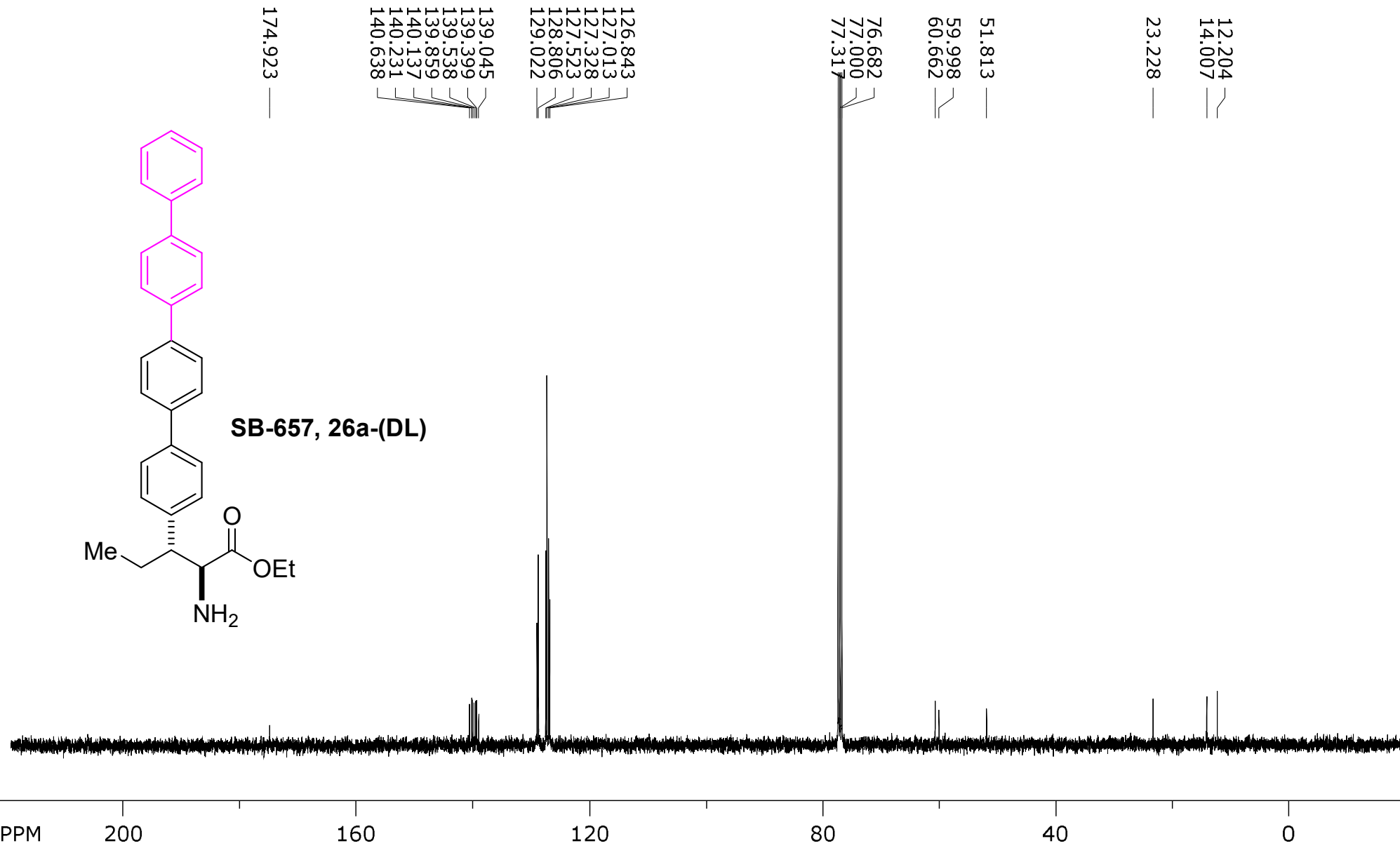


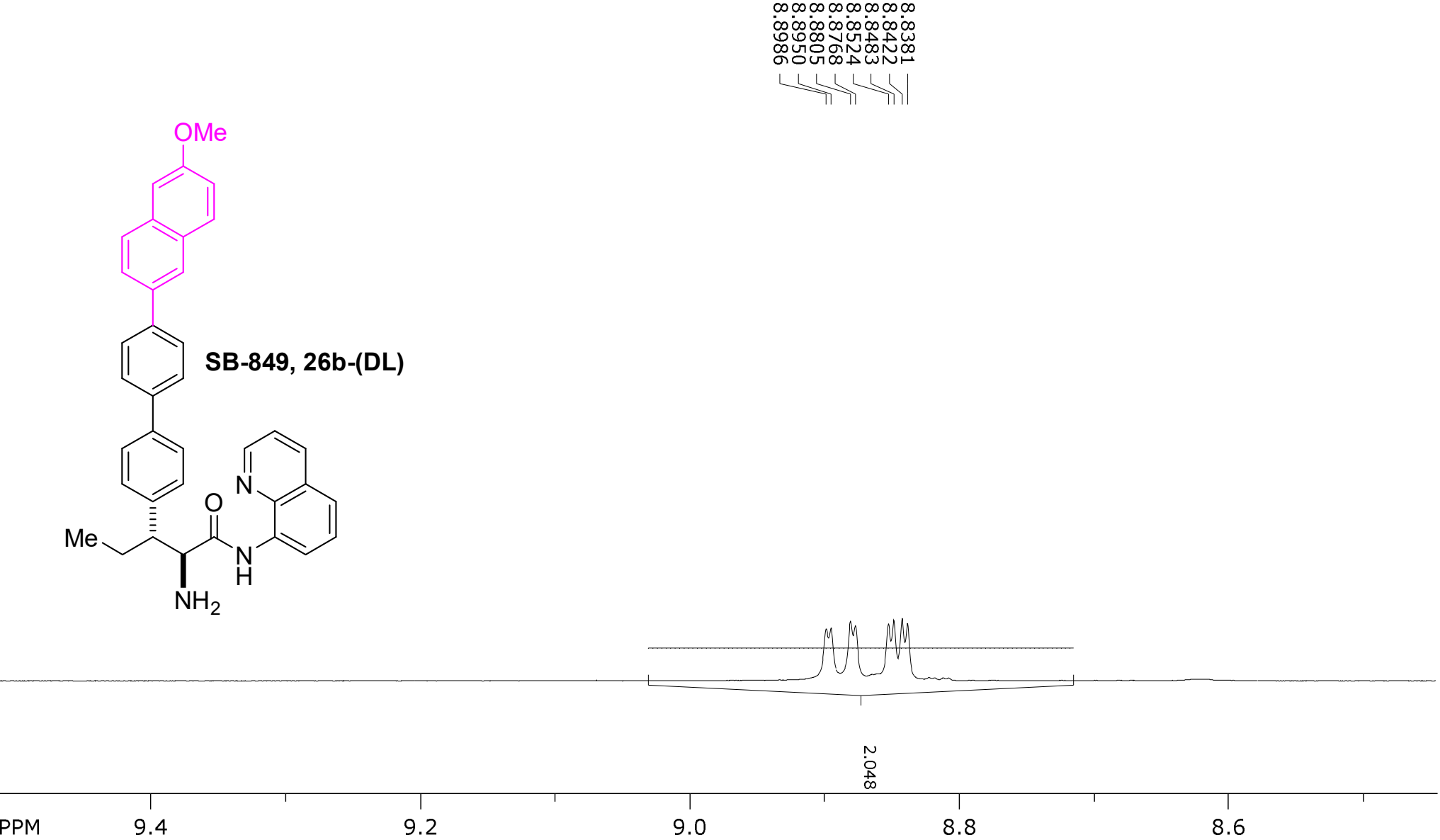


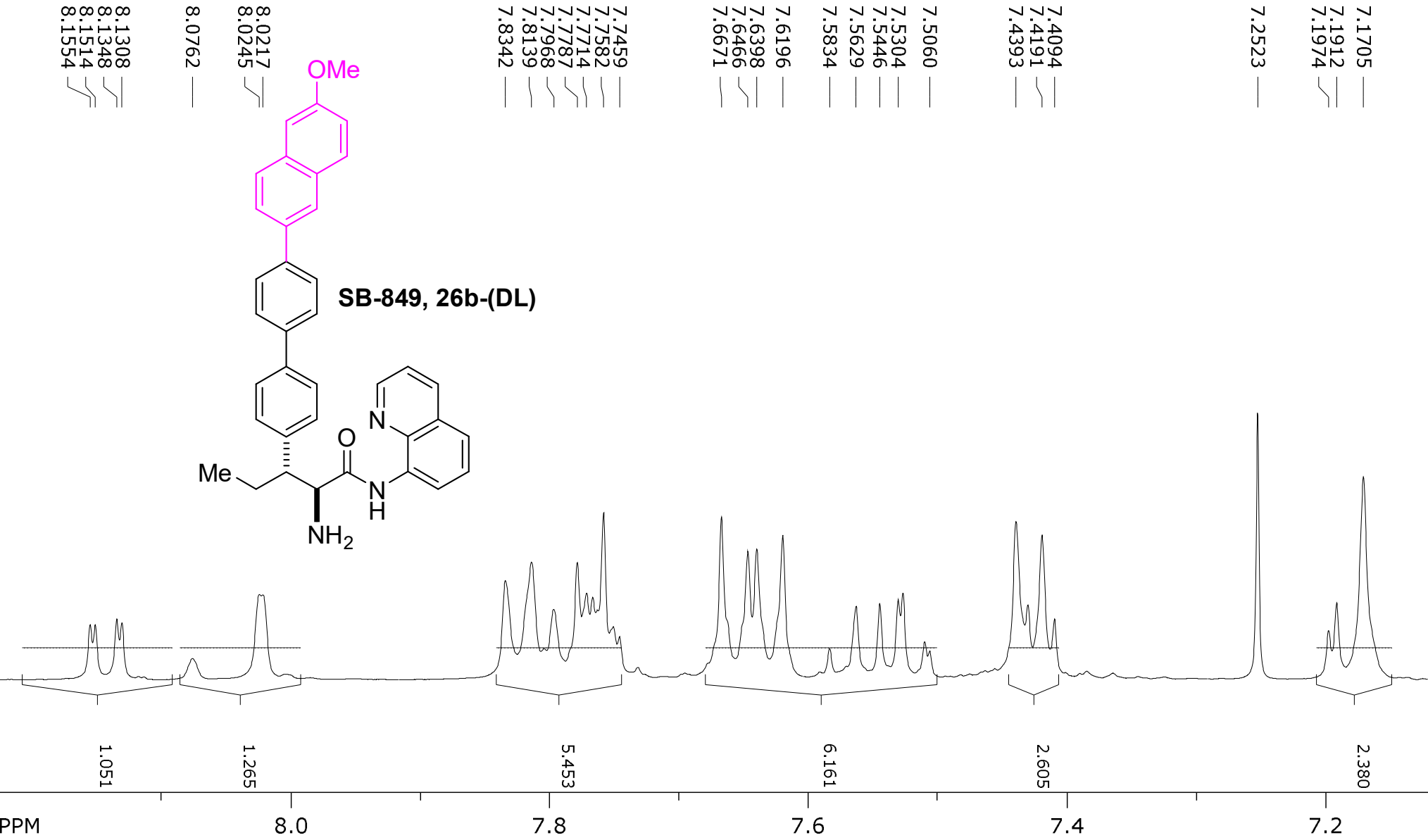


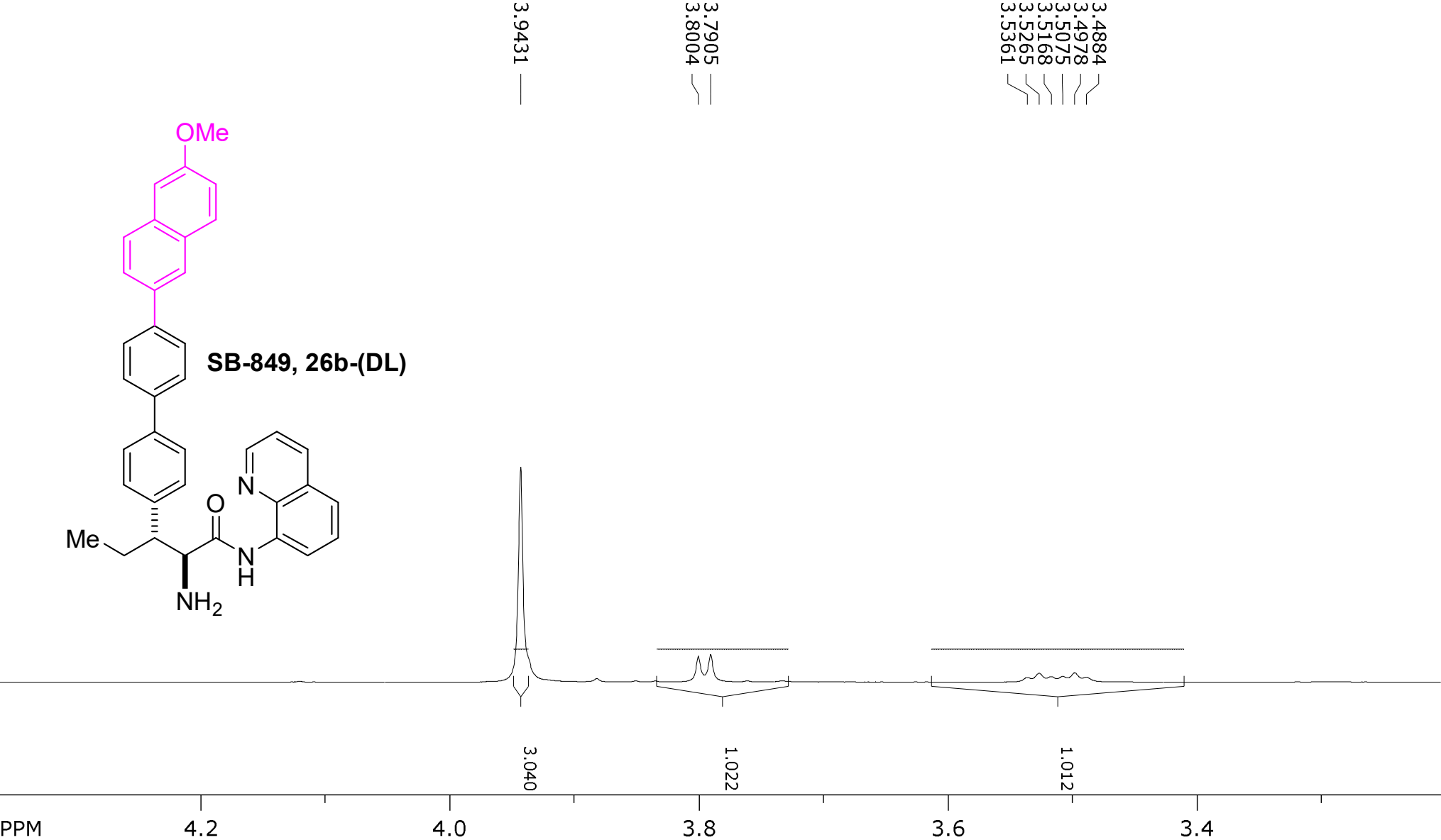








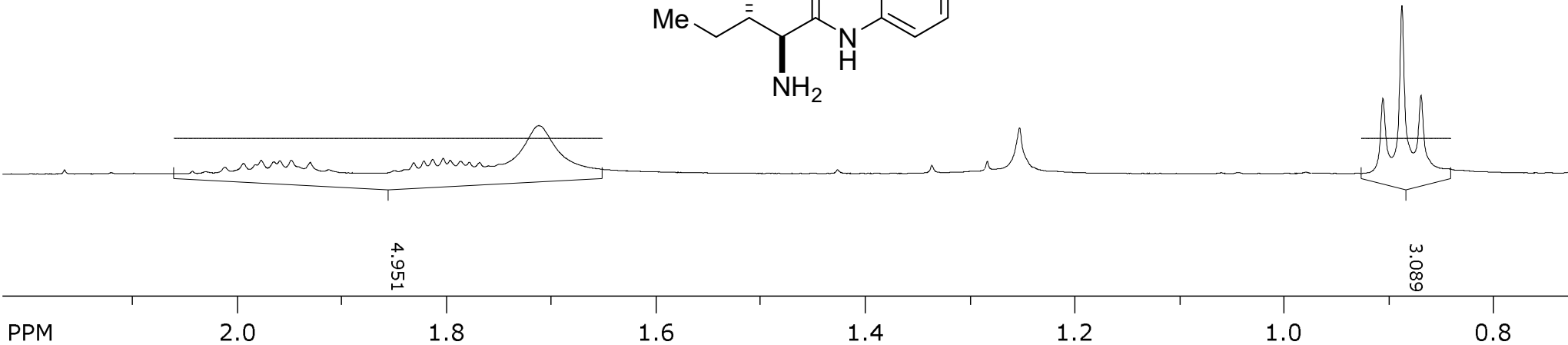
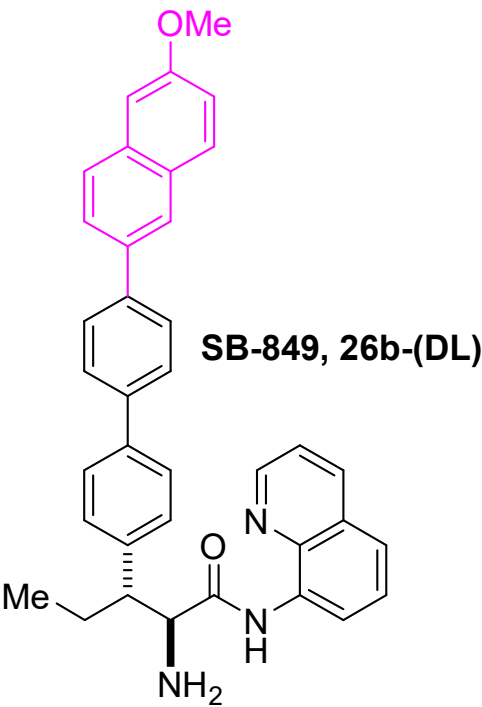


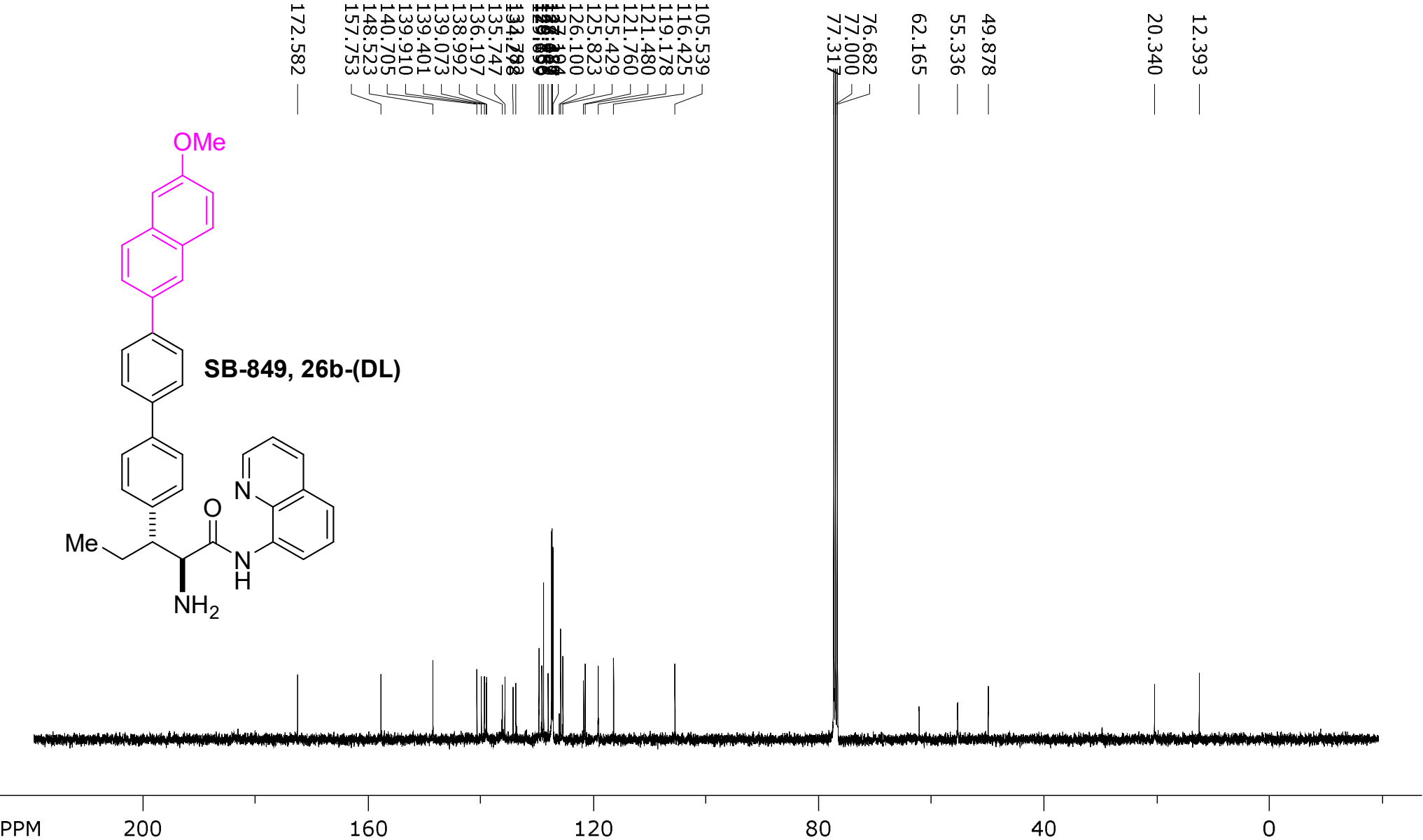


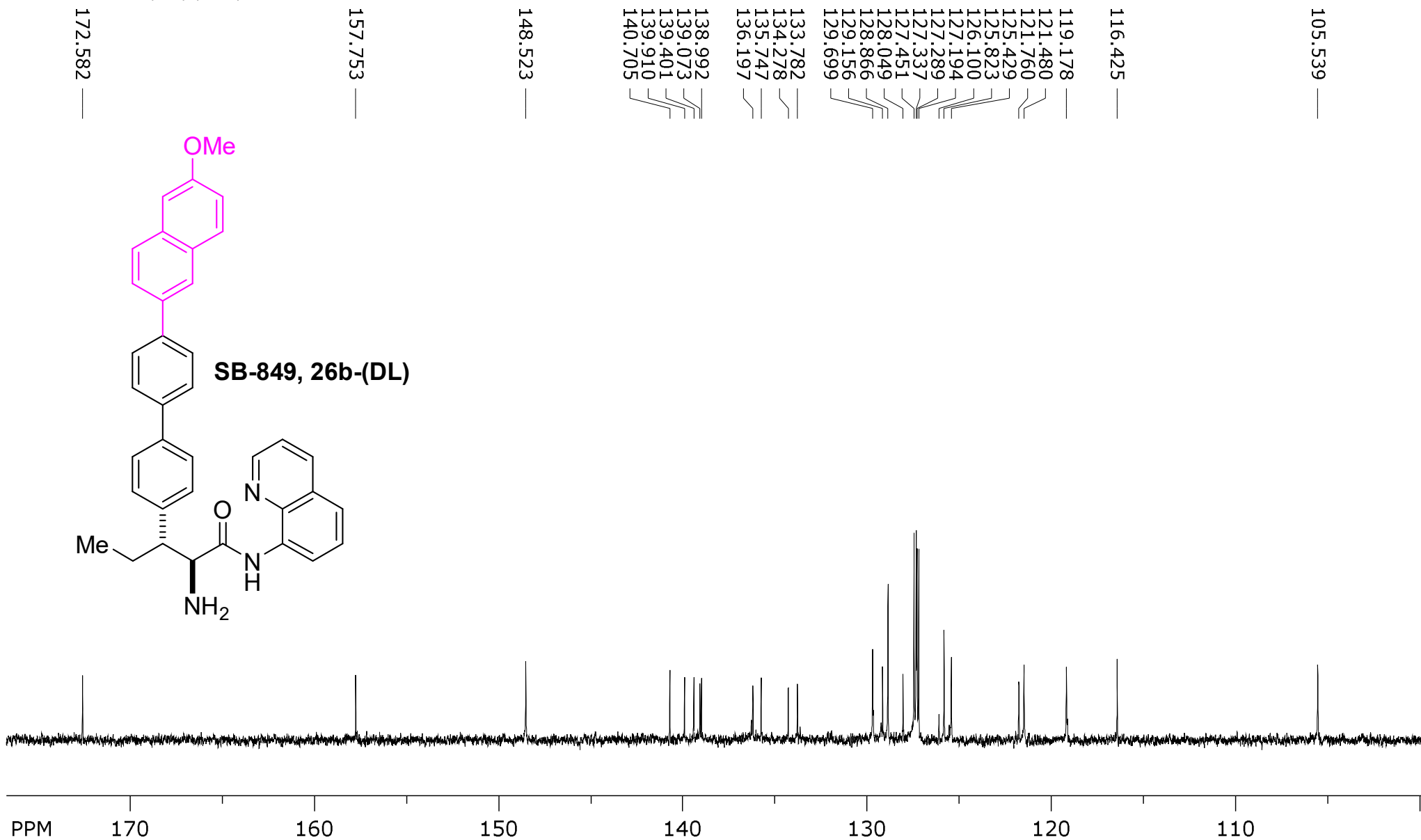
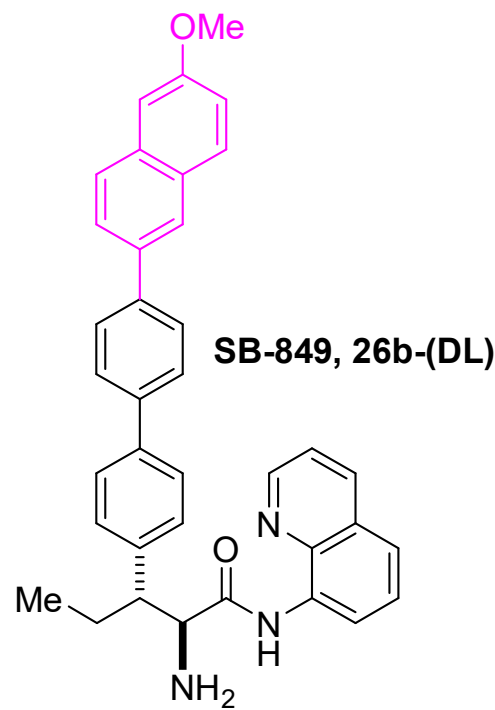
1.7121
1.7495
1.7687
1.7785
1.7869
1.7968
1.8135
1.8219
1.8317
1.8536
1.9307
1.9487
1.9944
2.0110
2.0266
2.0442

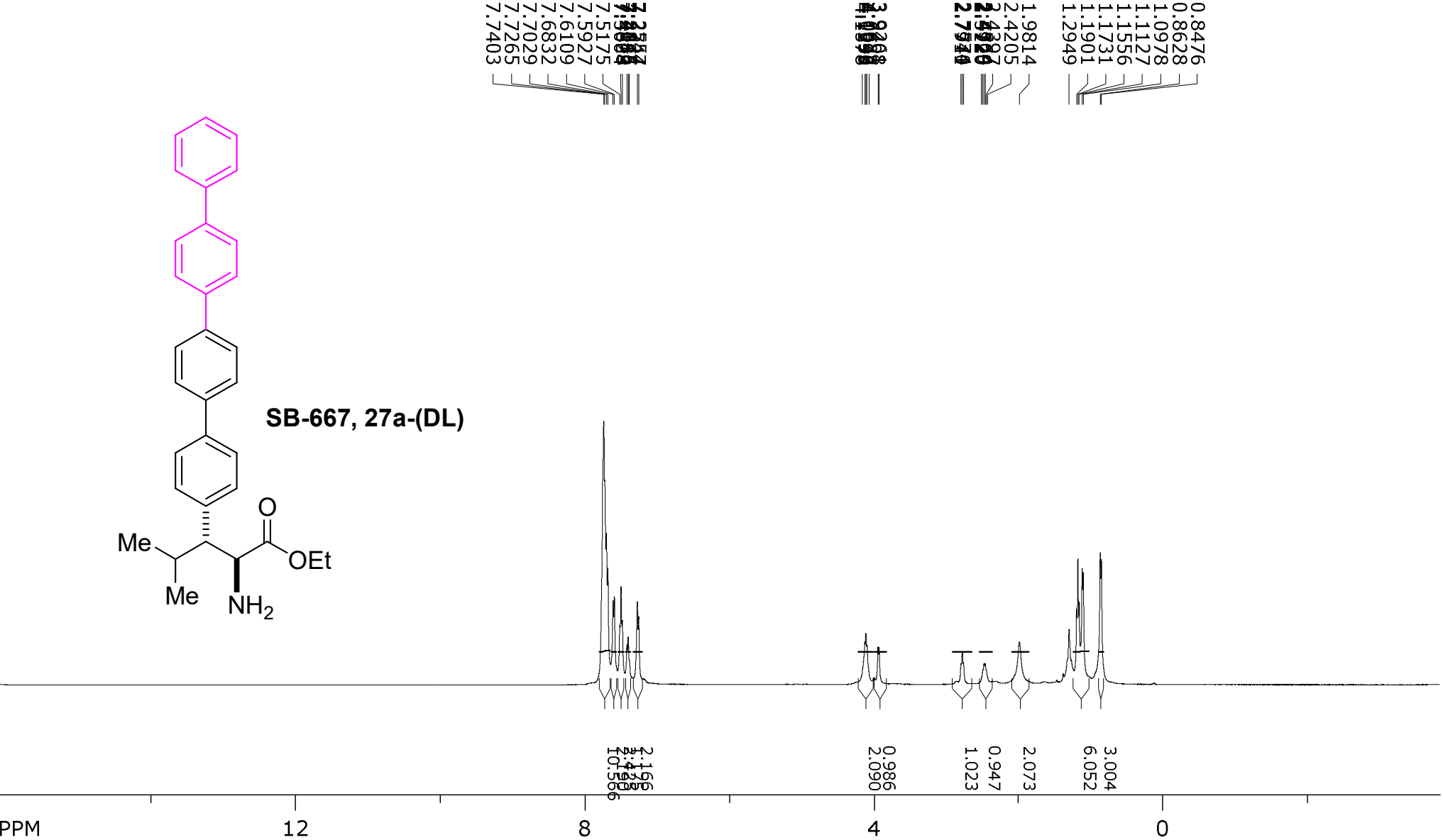
1.2526

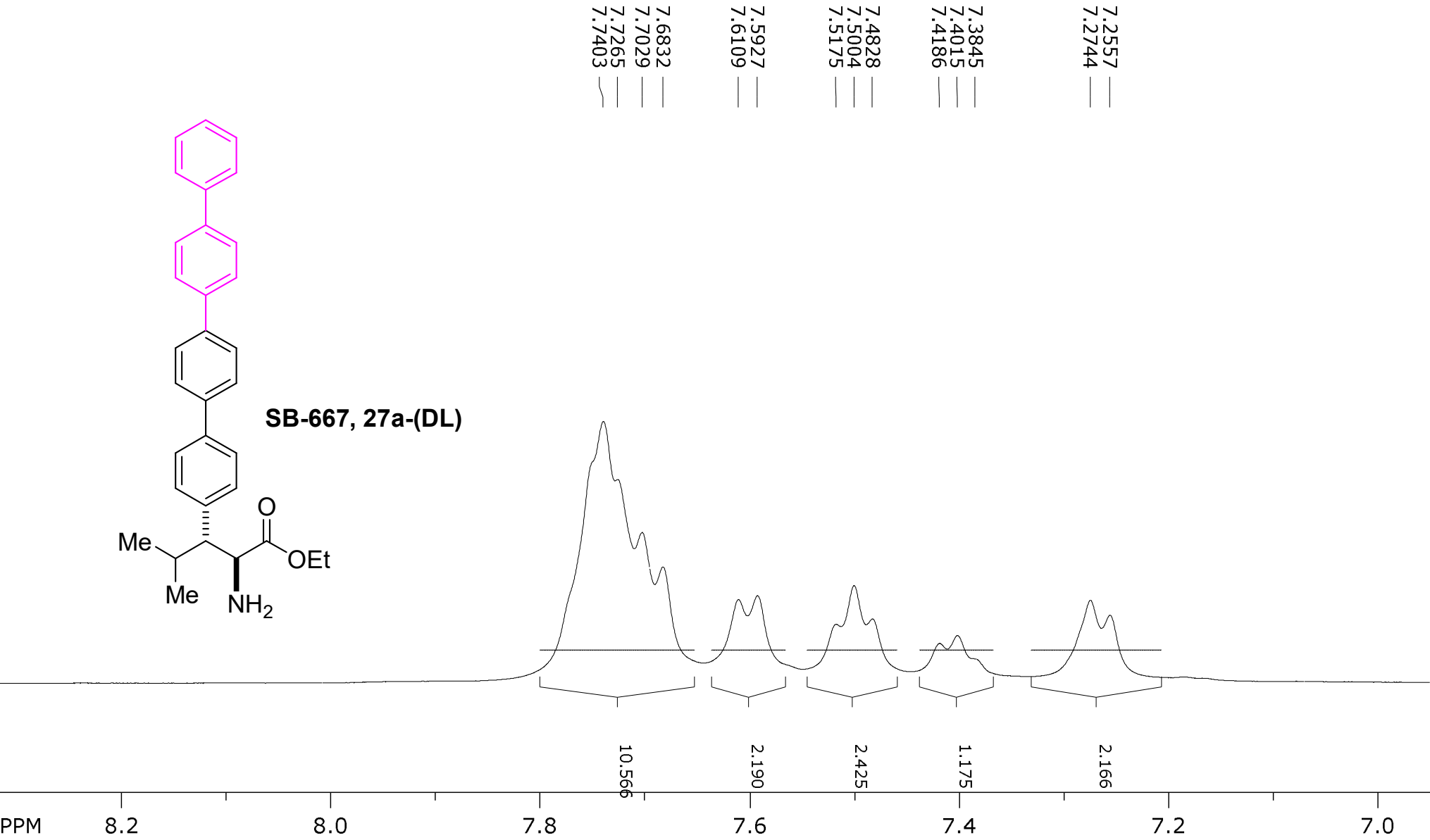
0.8688
0.8870
0.9052

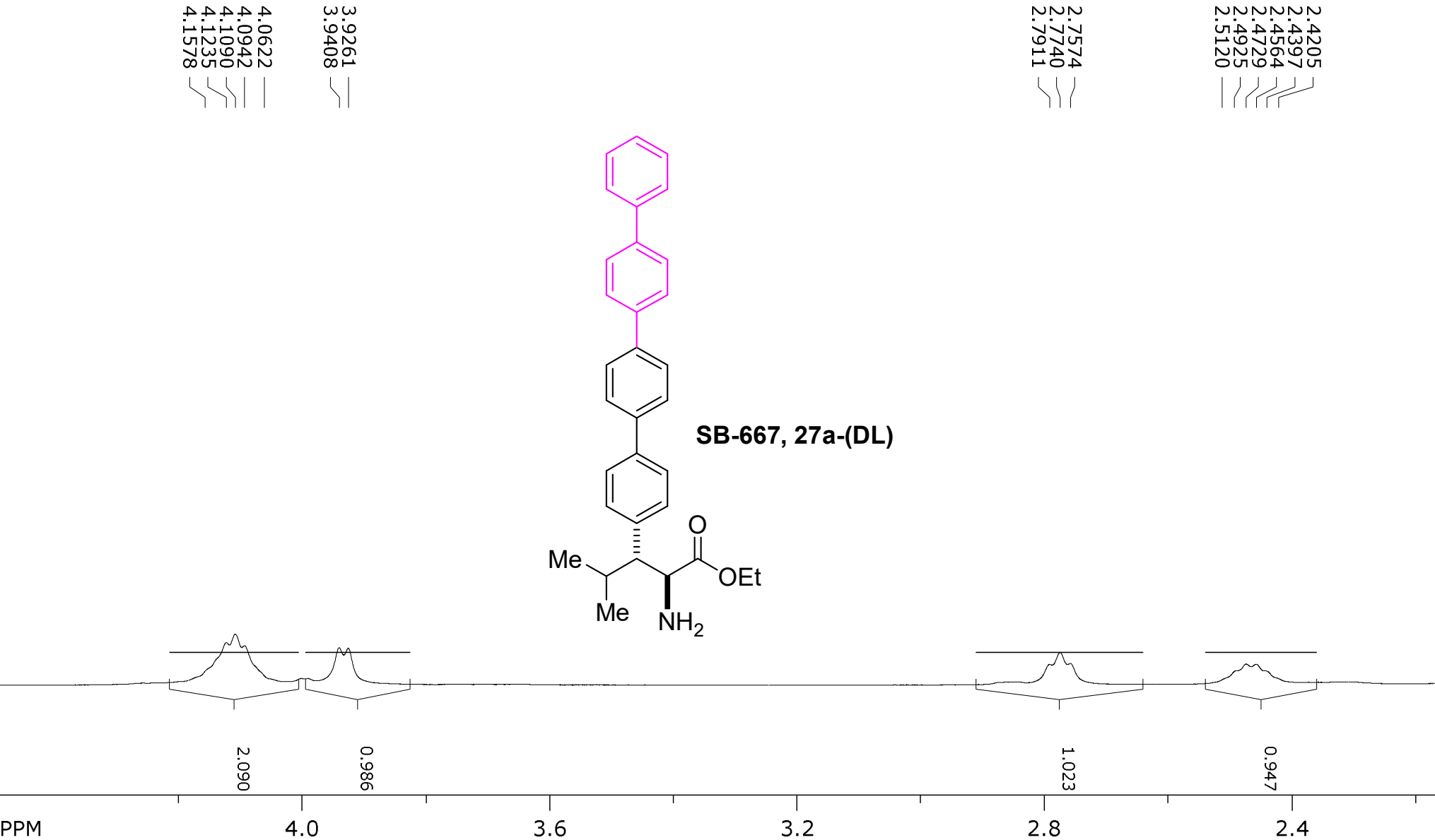


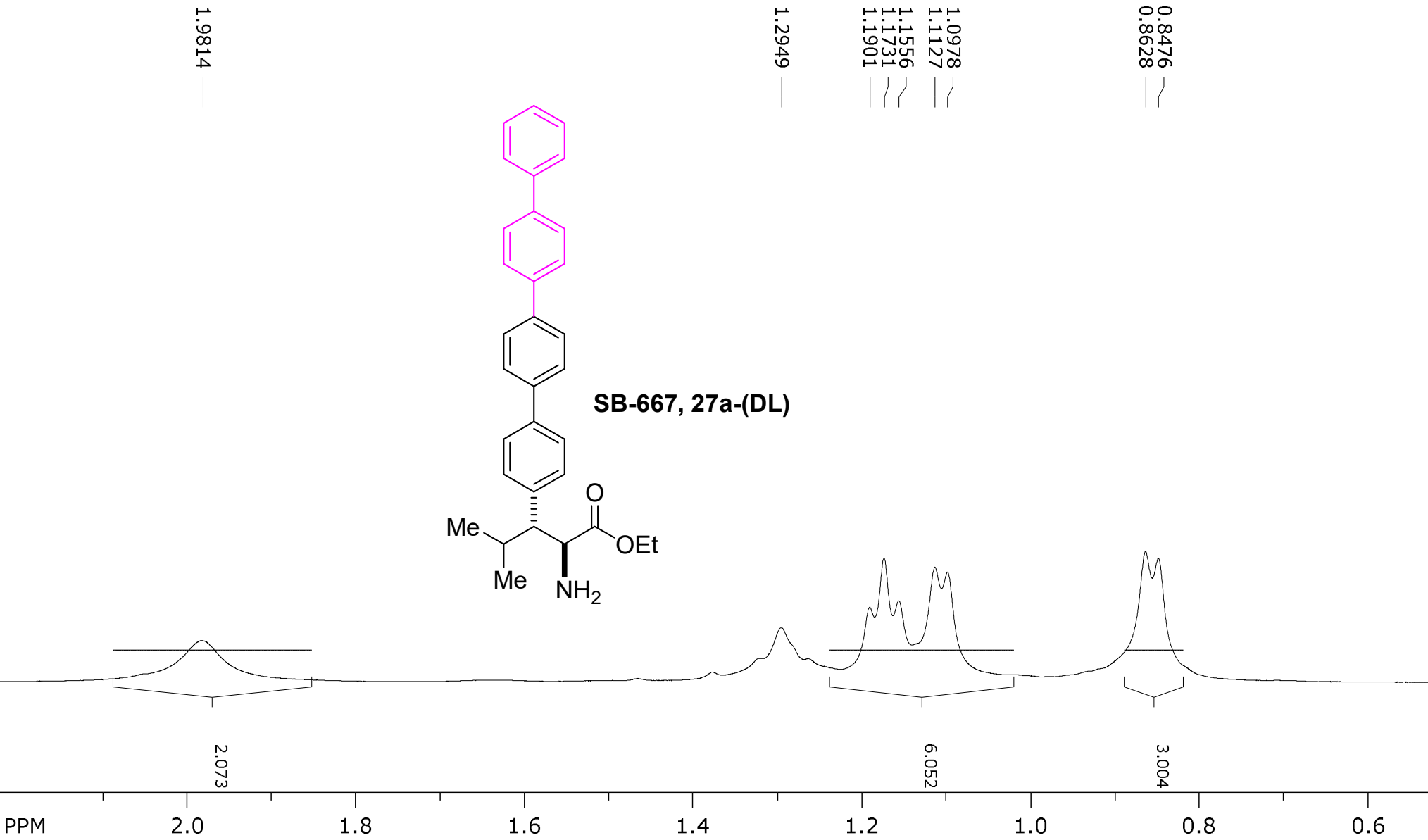


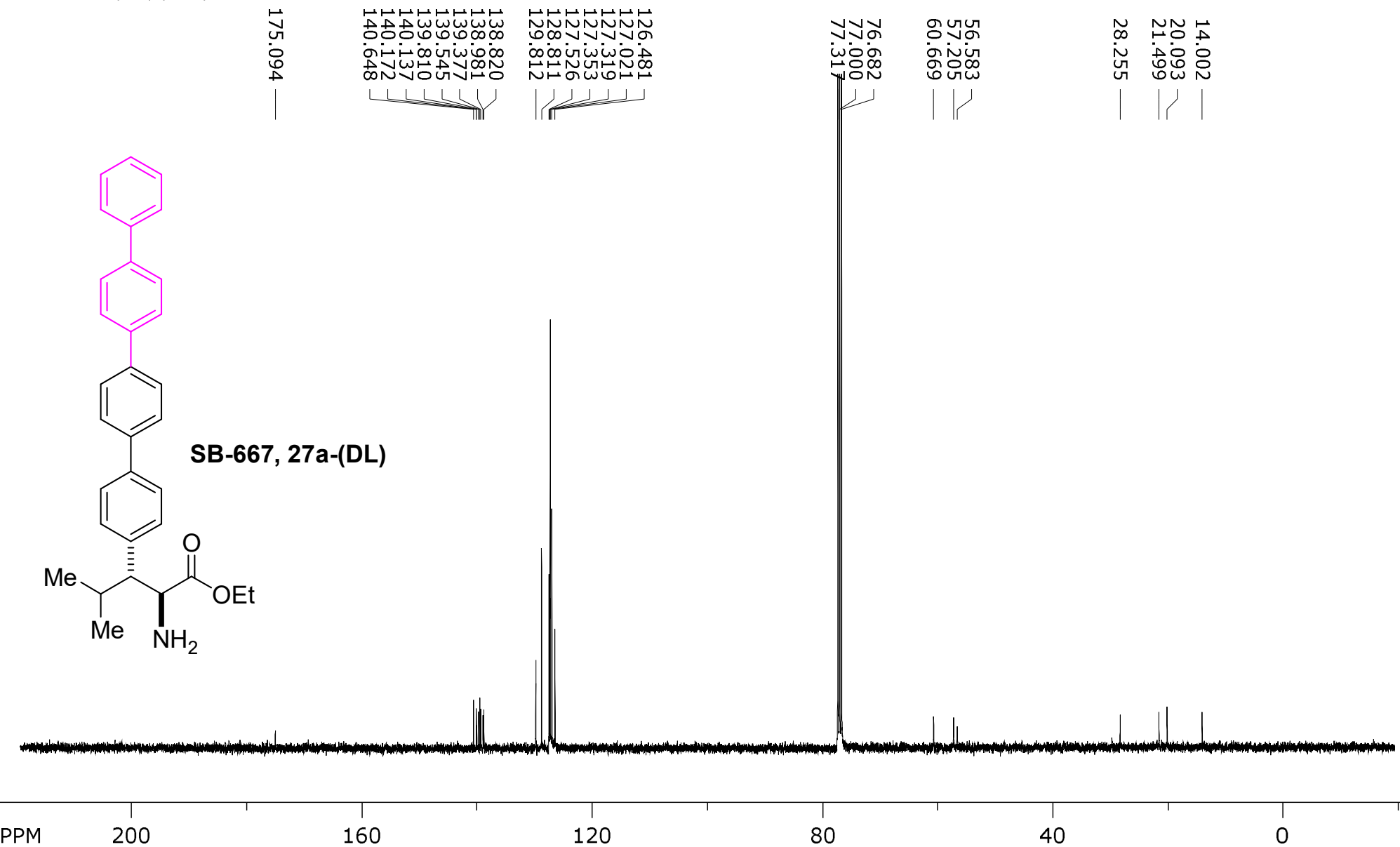


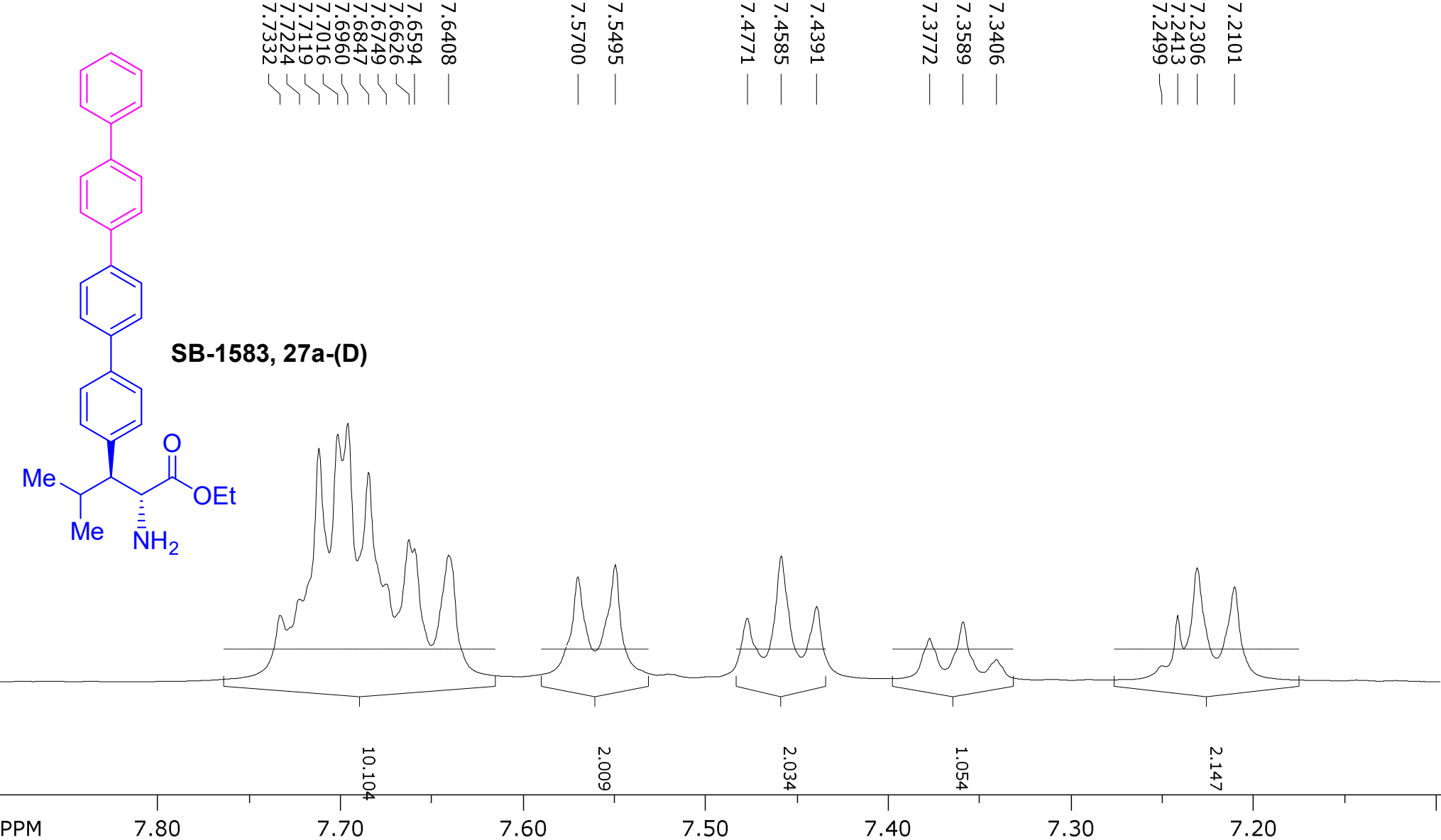


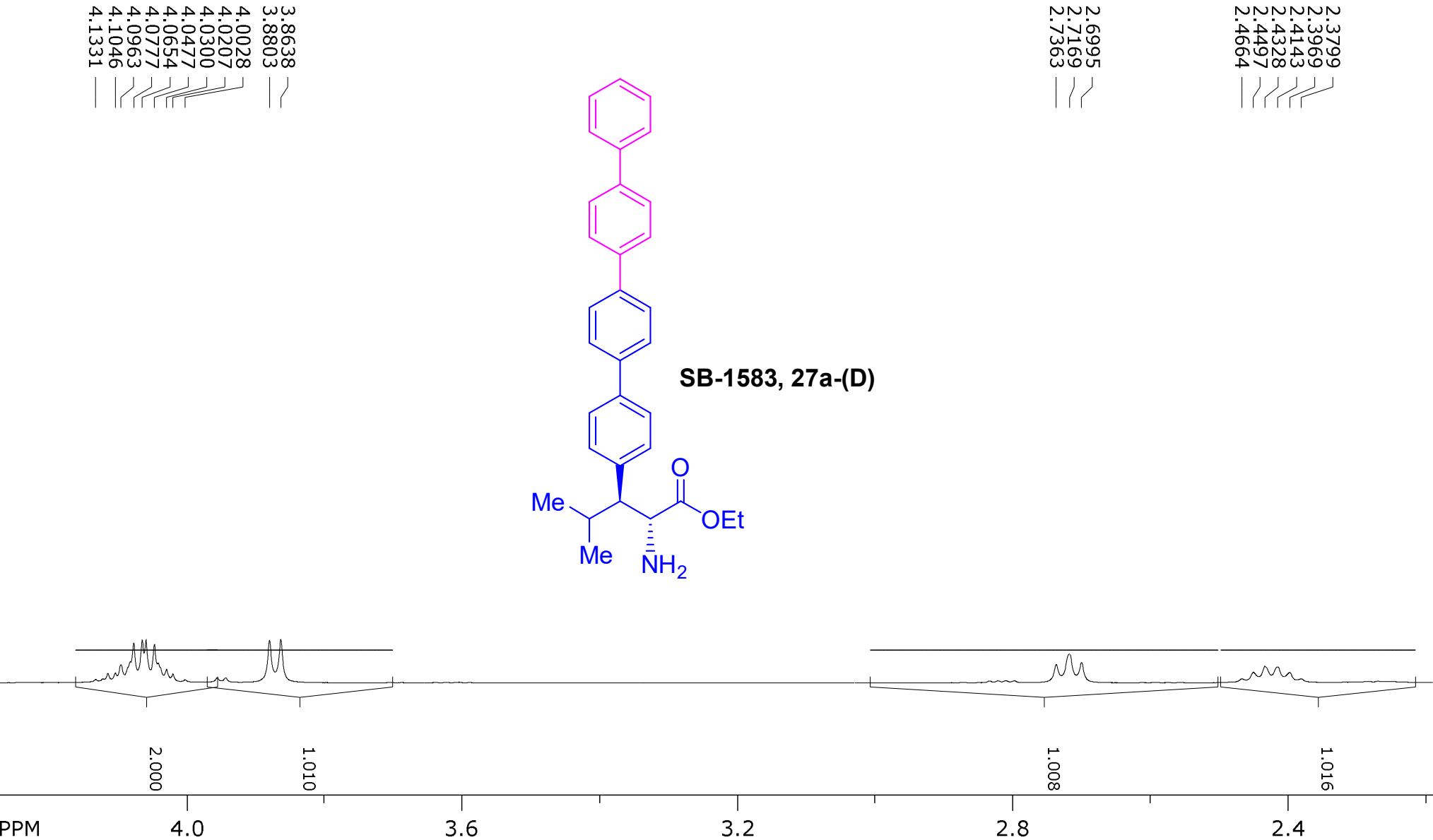


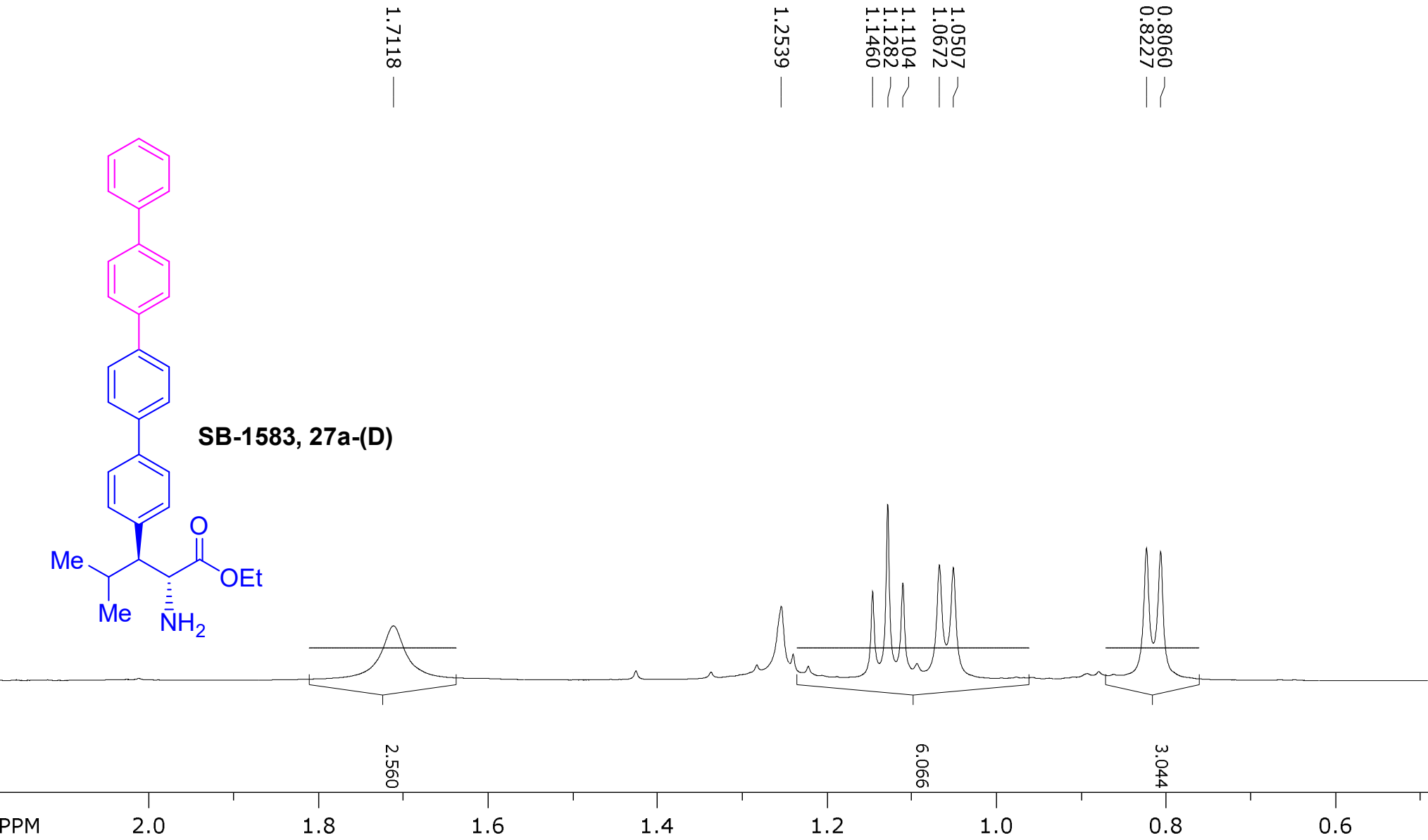


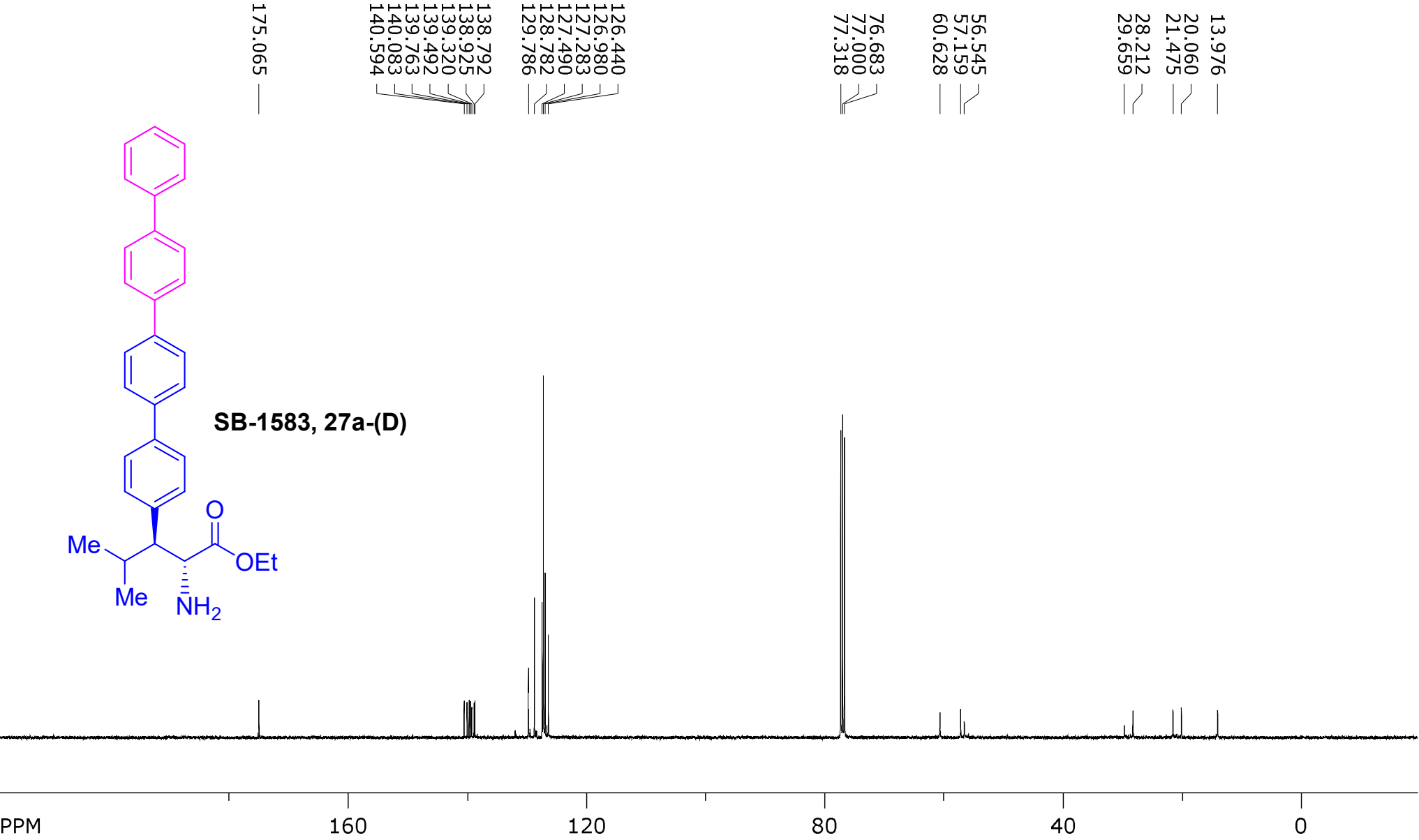


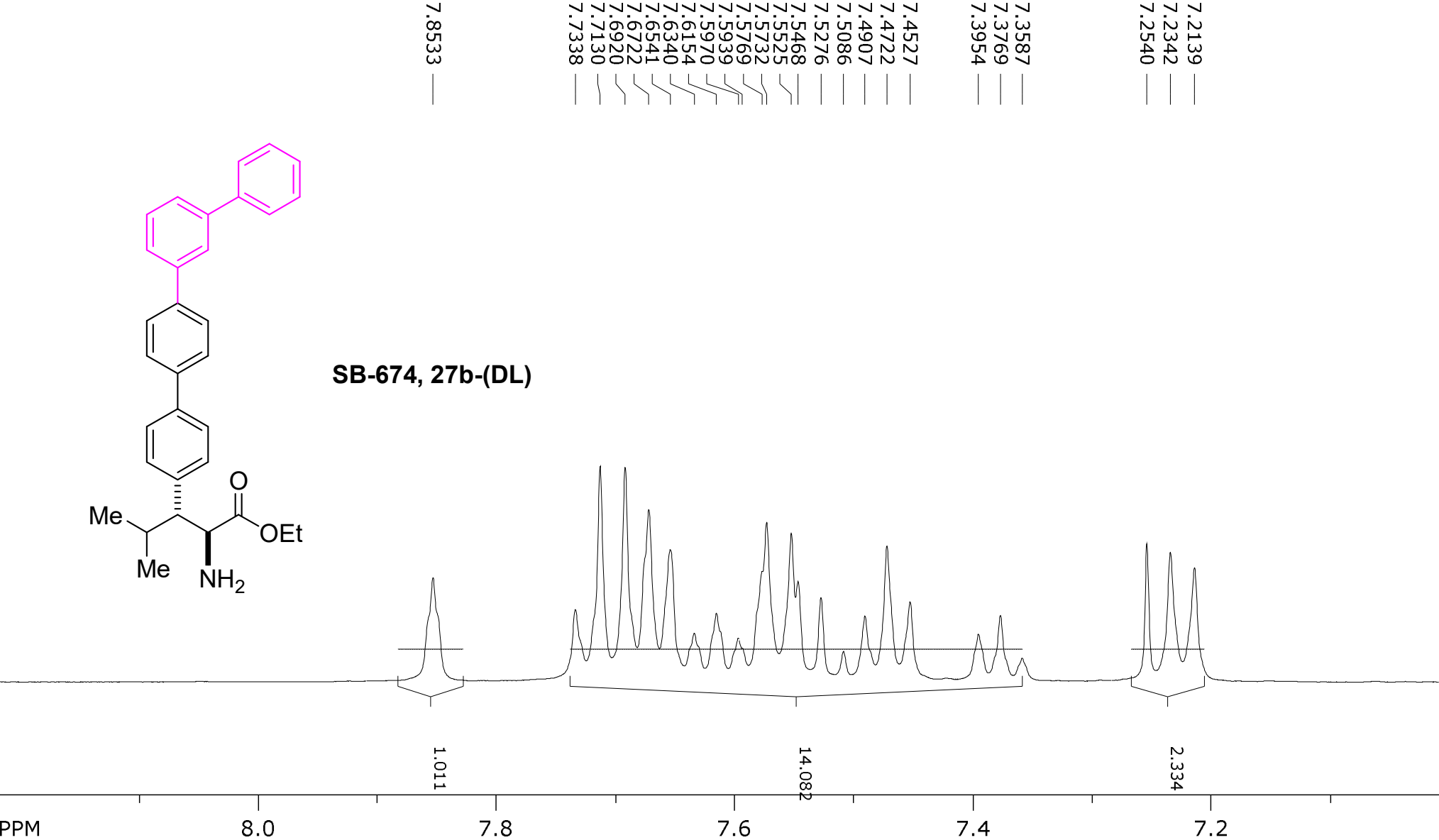


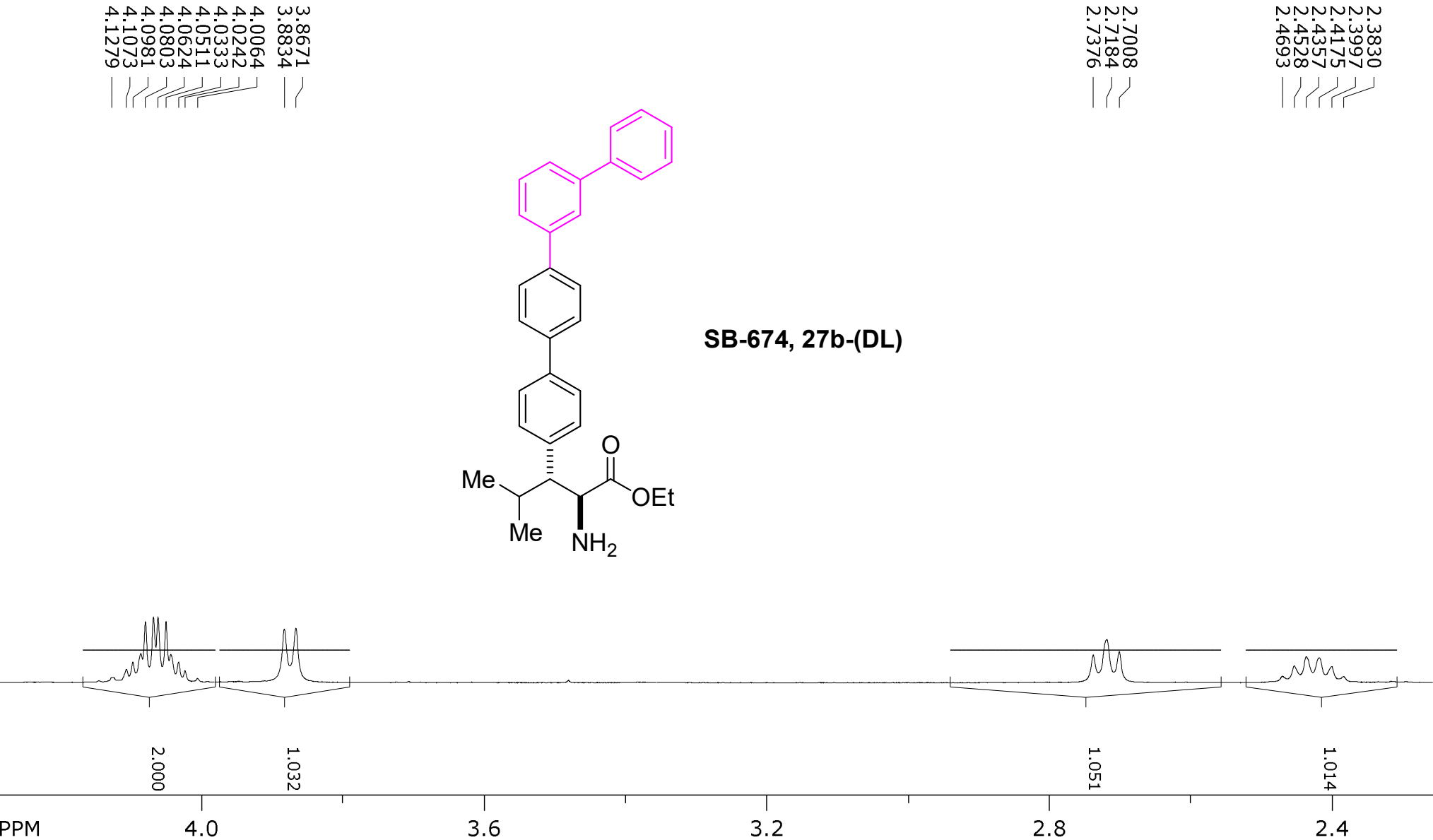


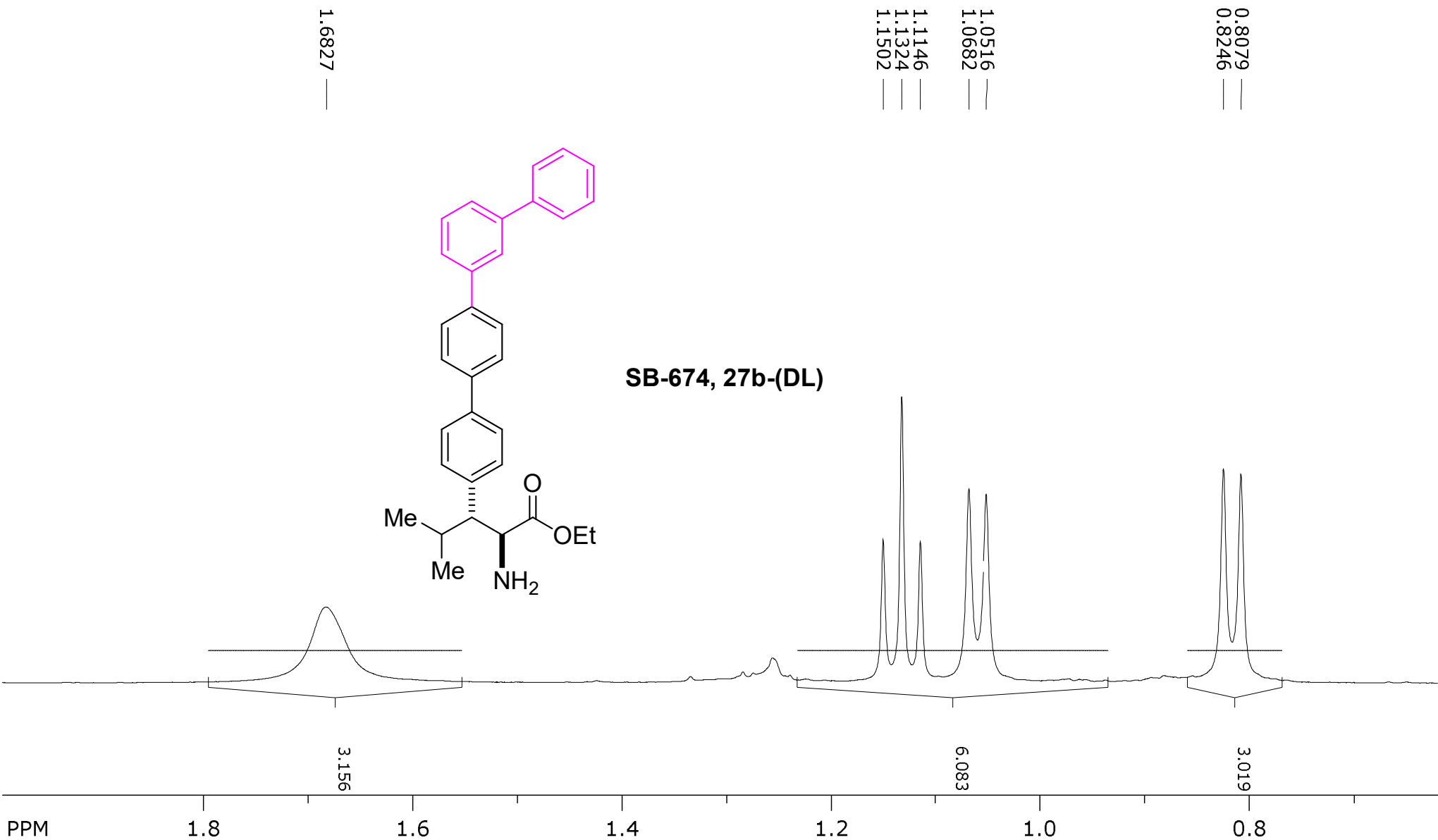


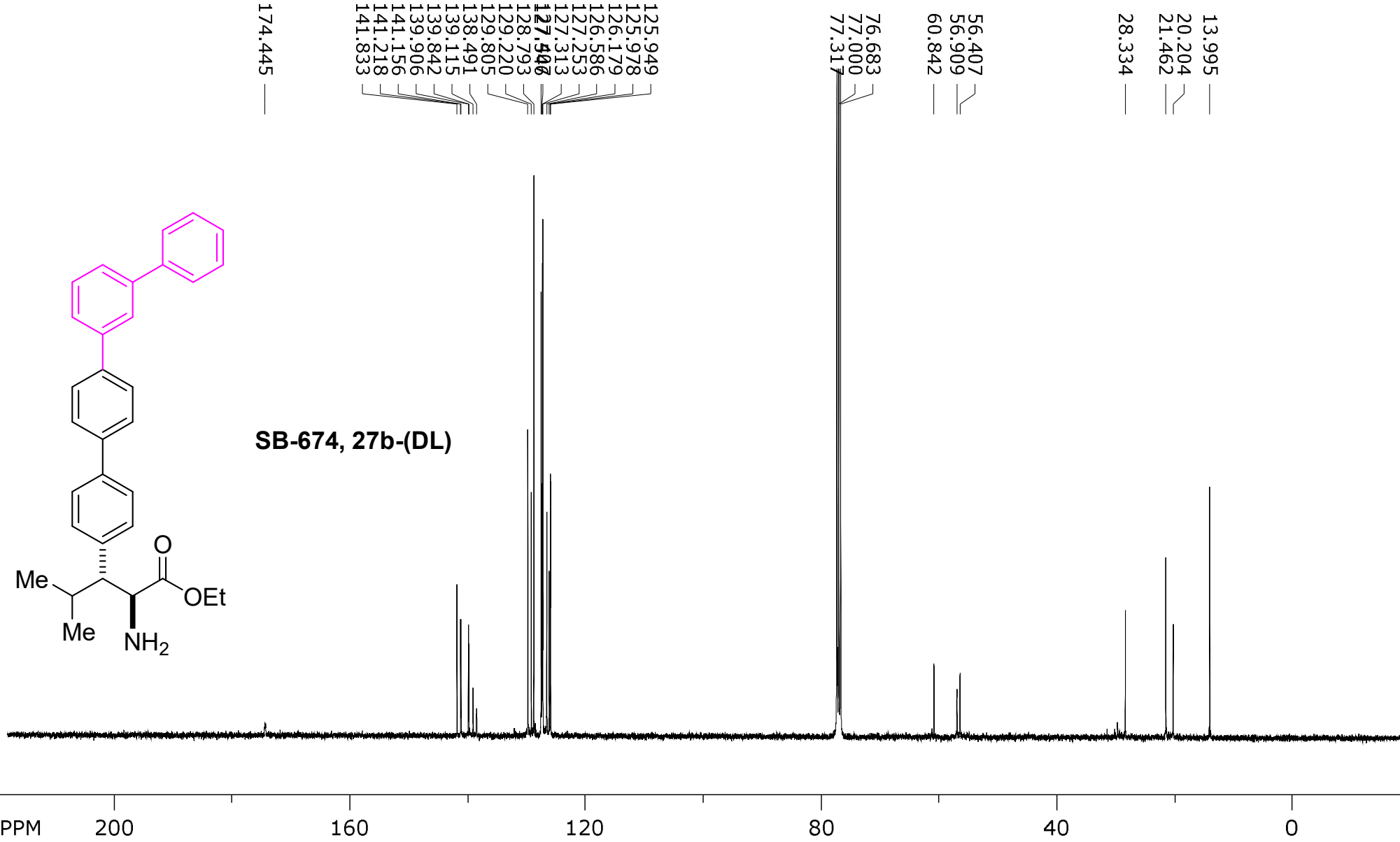


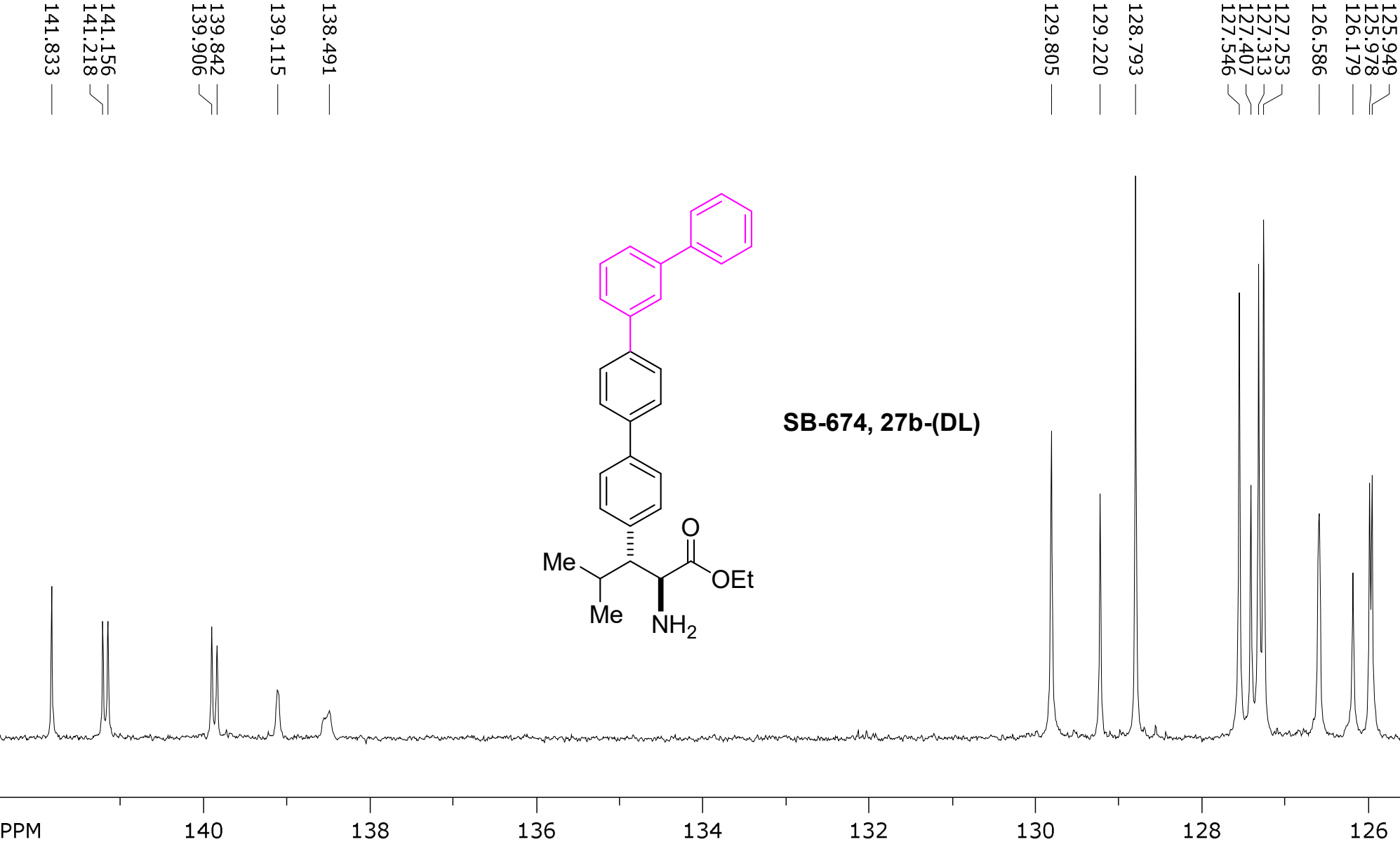


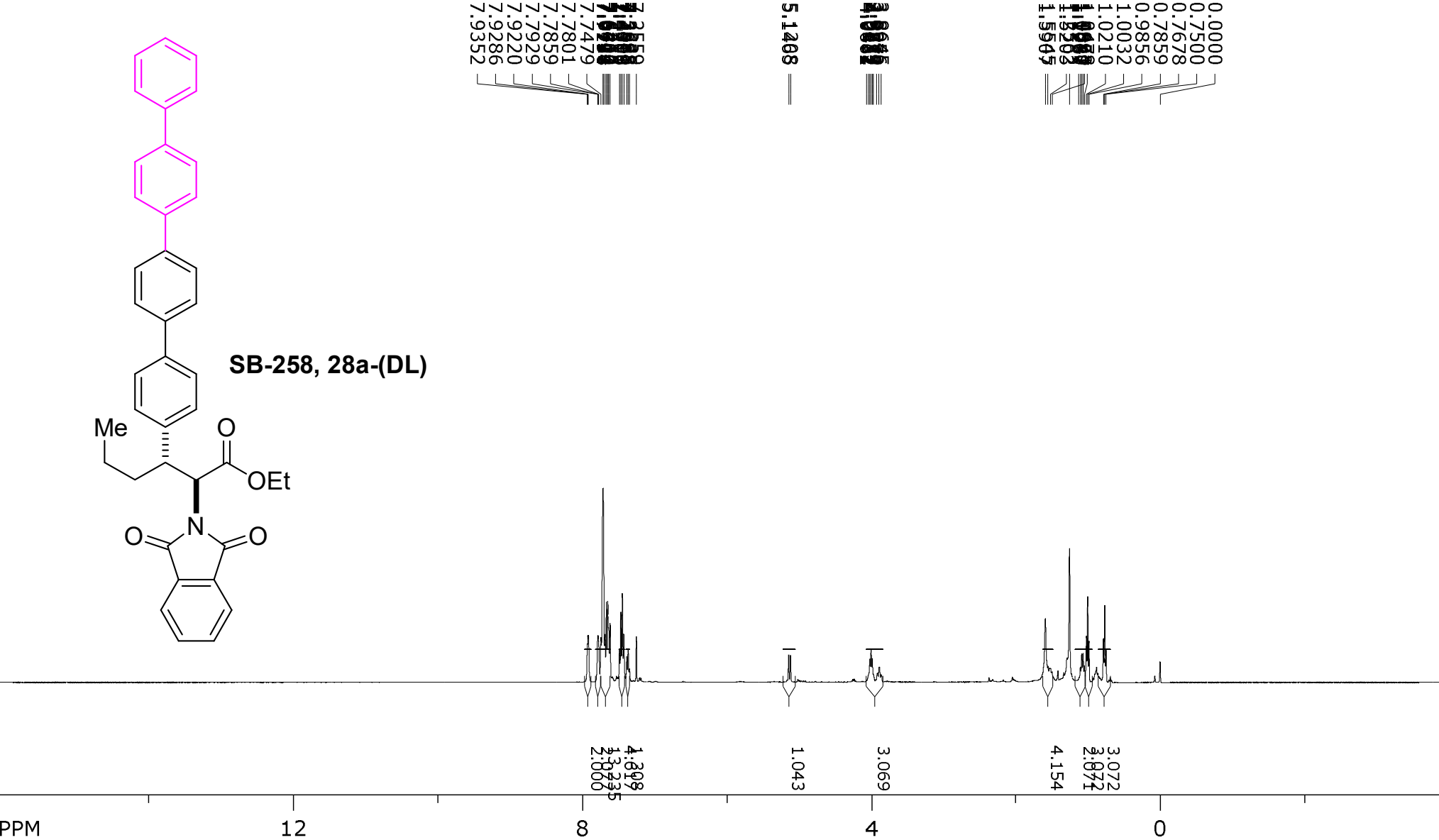


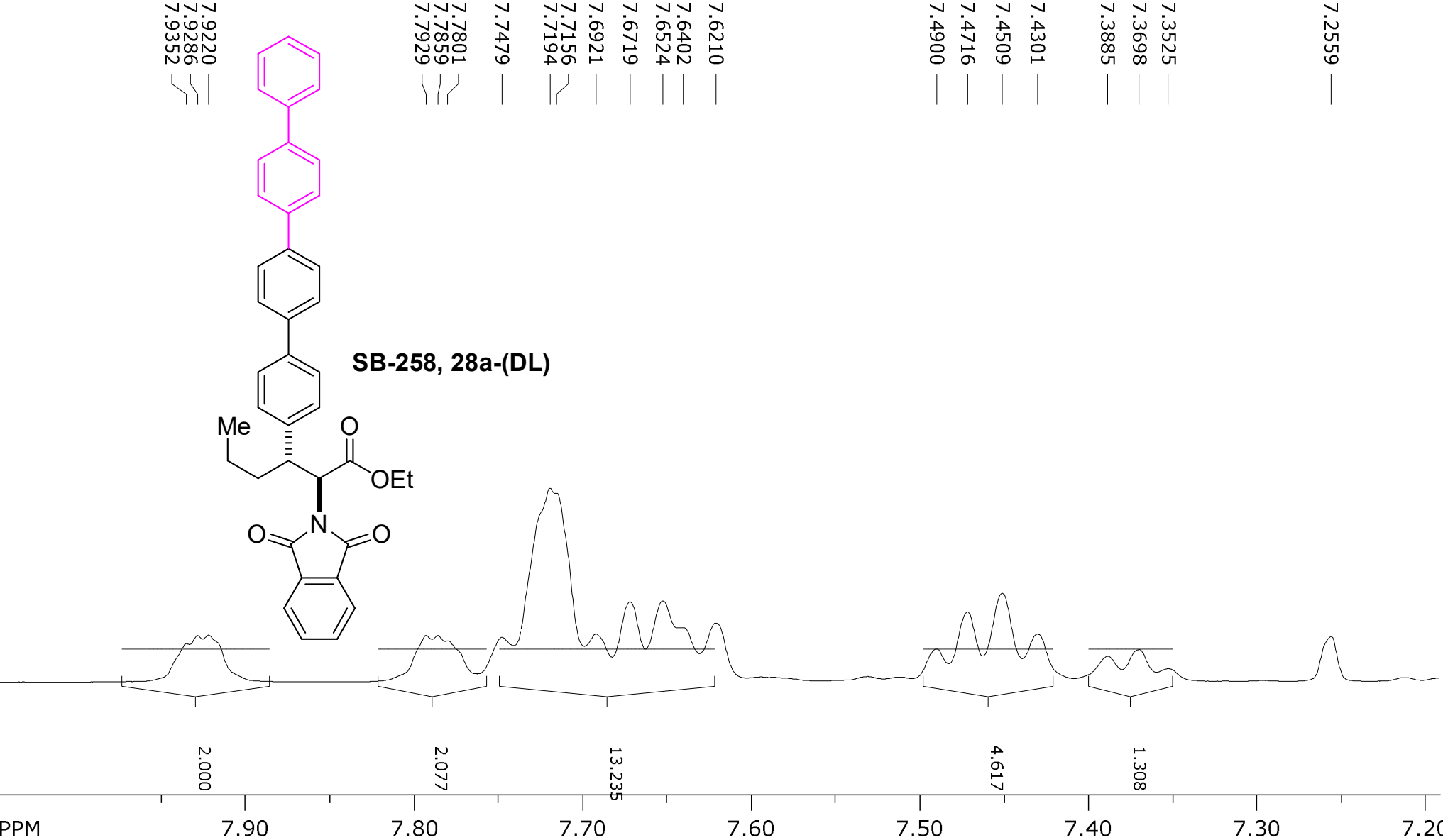


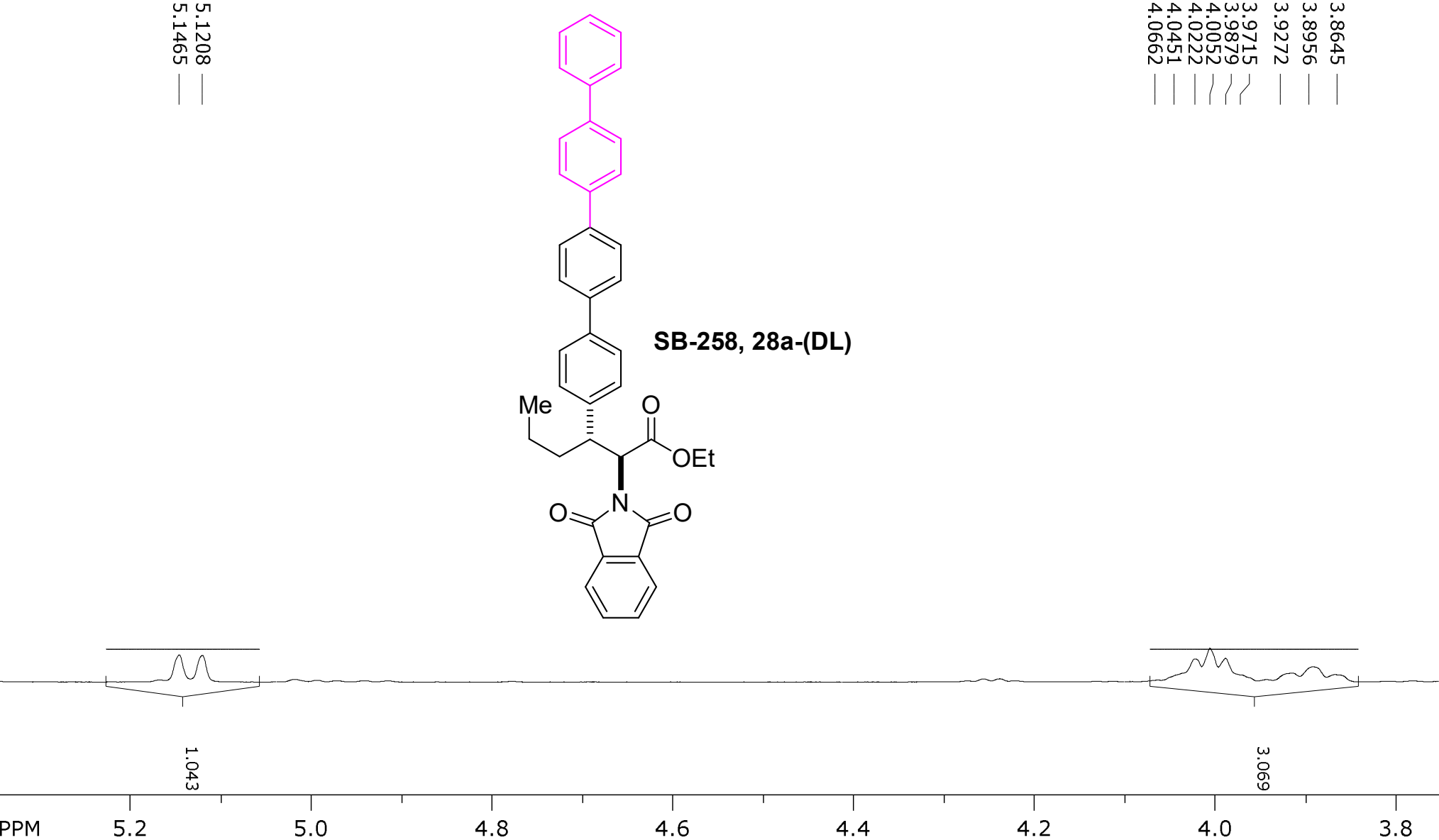


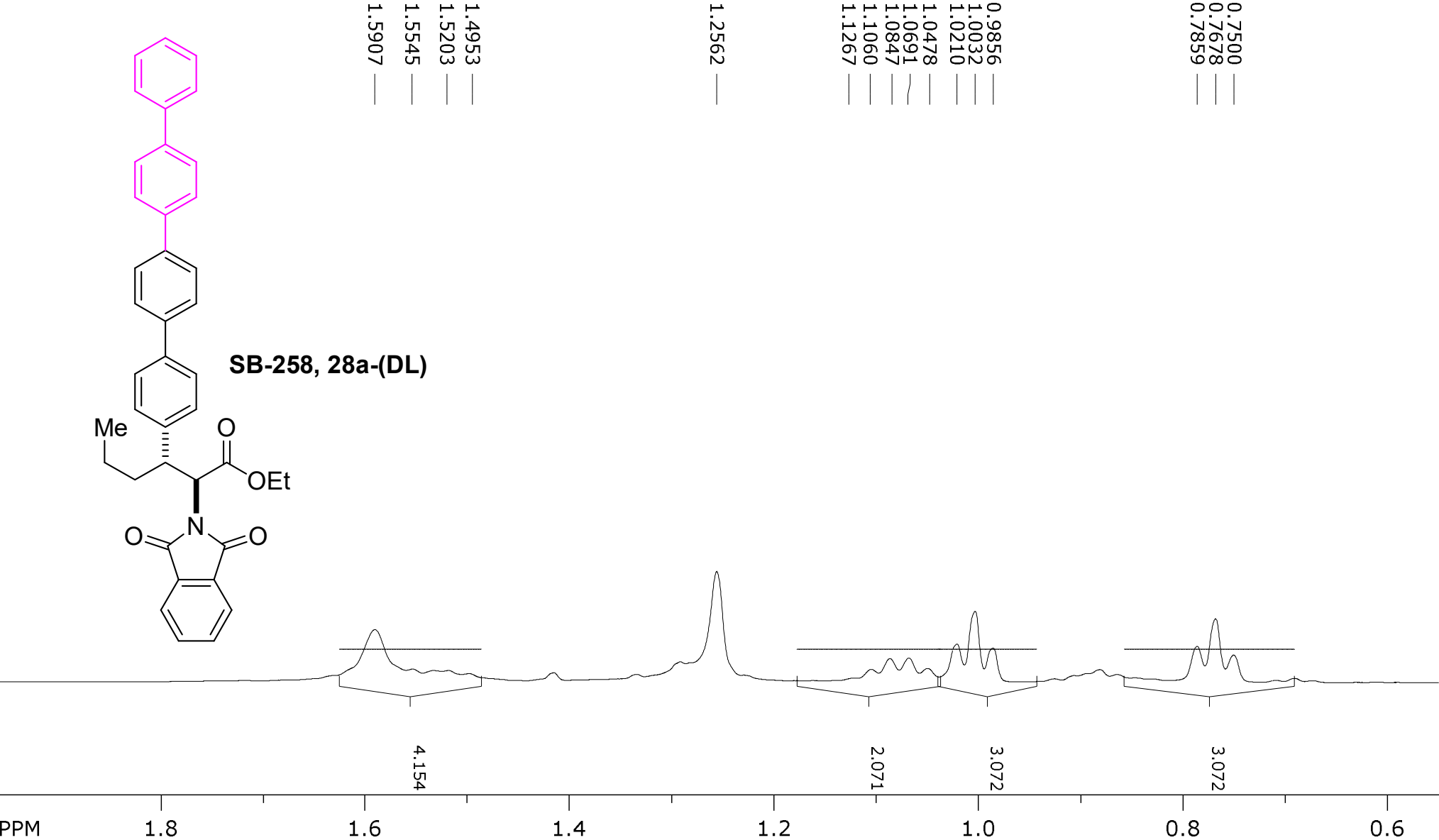


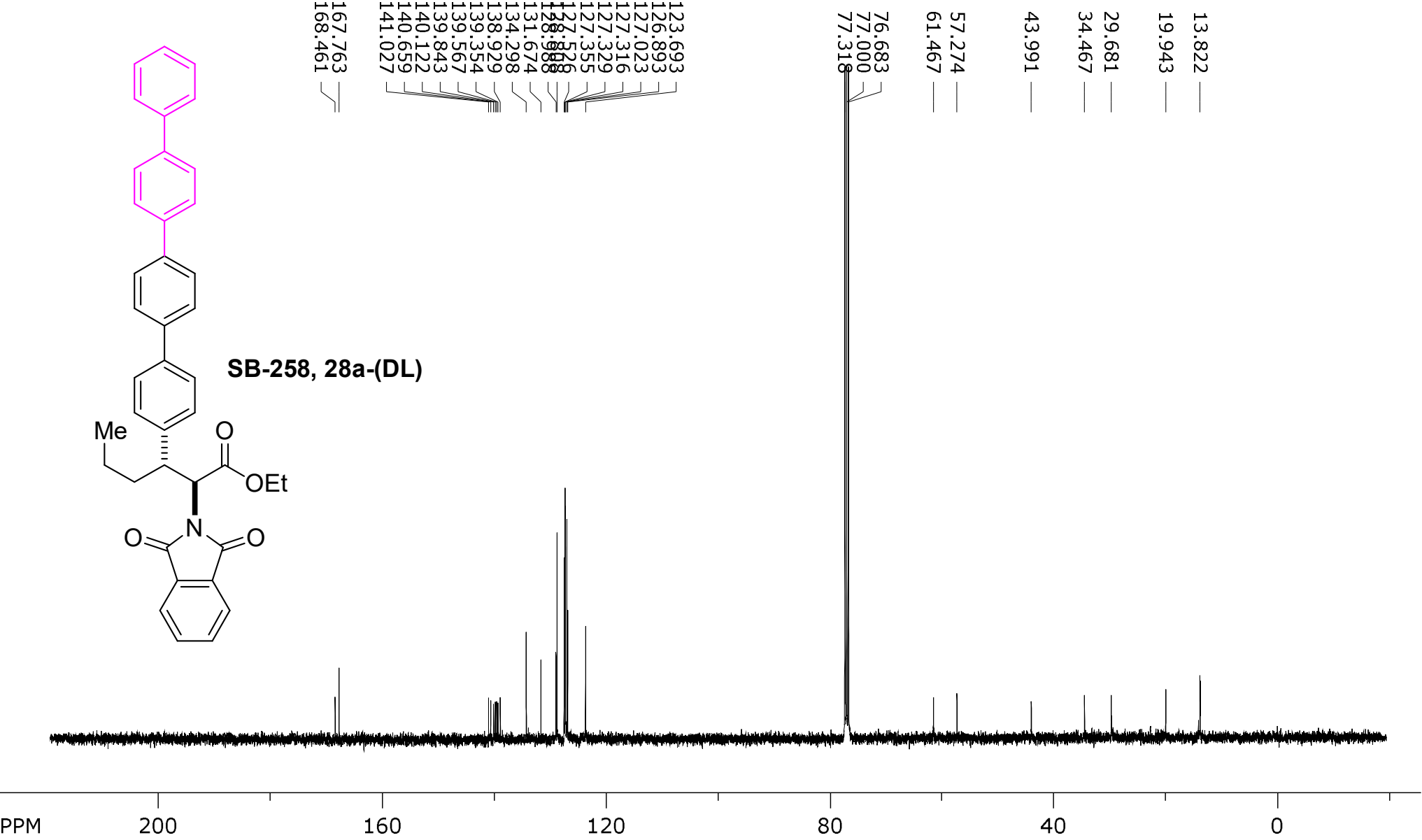












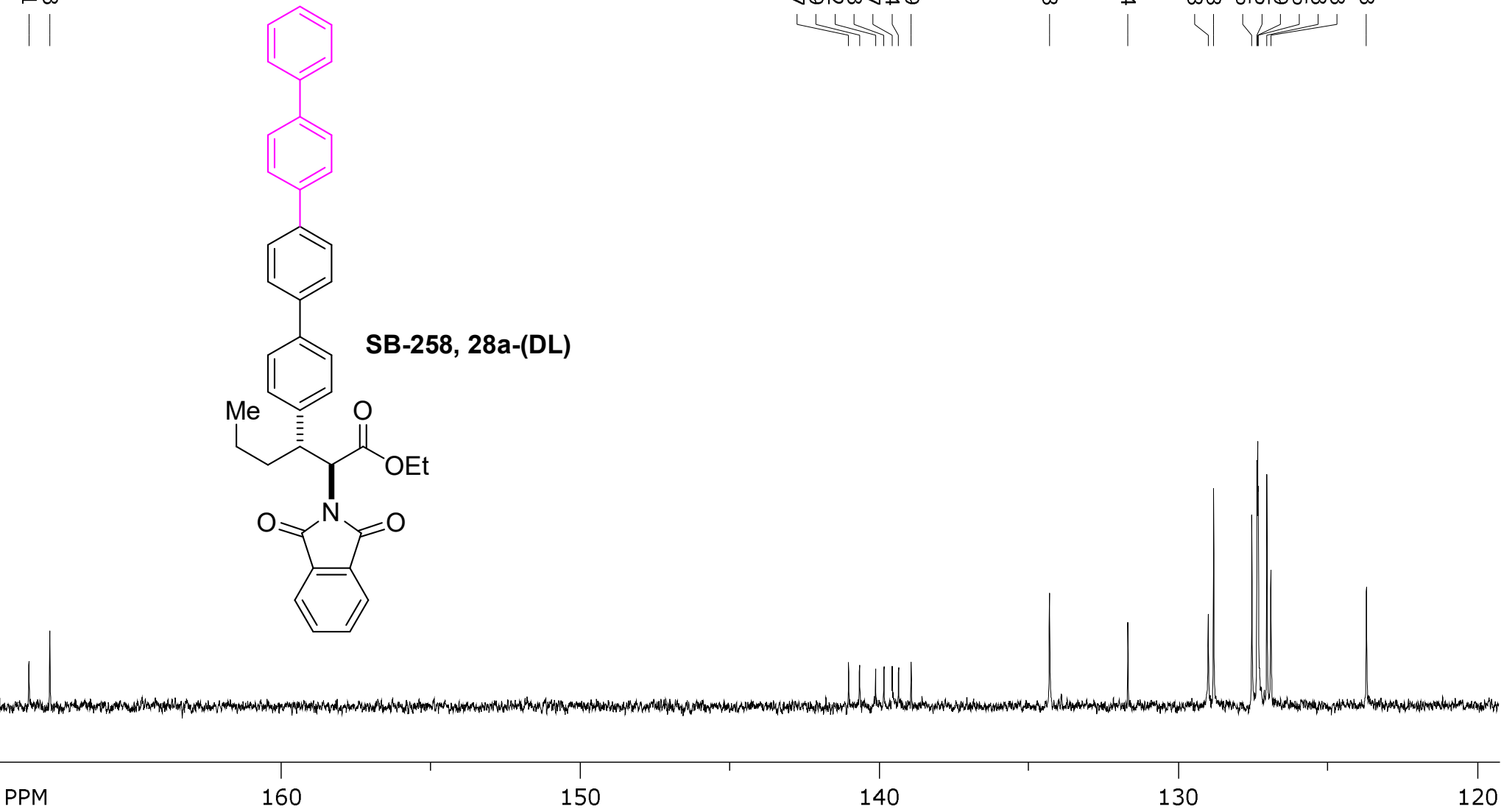
167.763 —
168.461 —
—

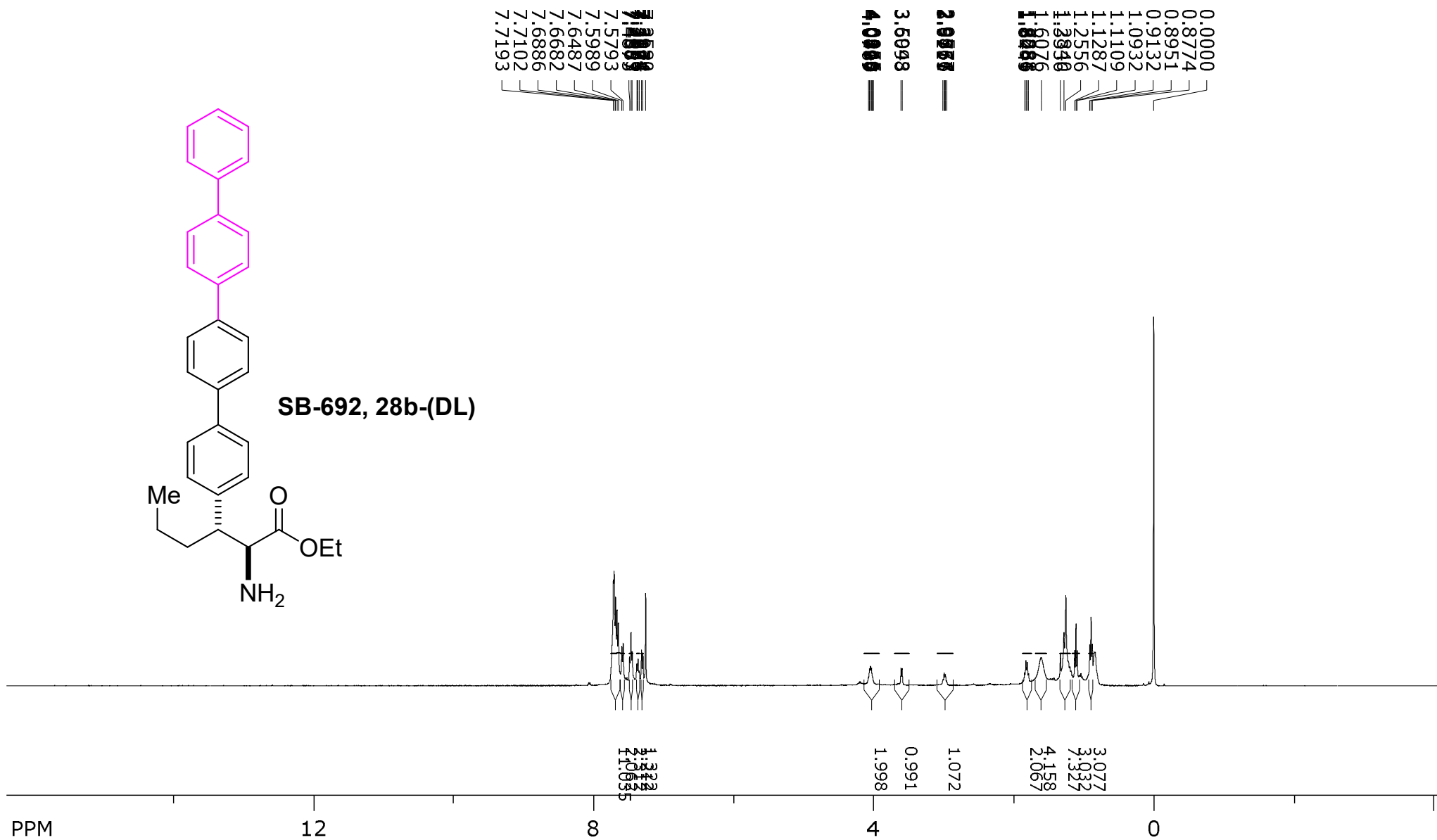
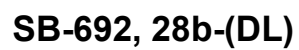
138.929 —
139.354 —
139.567 —
139.843 —
140.122 —
140.659 —
141.027 —

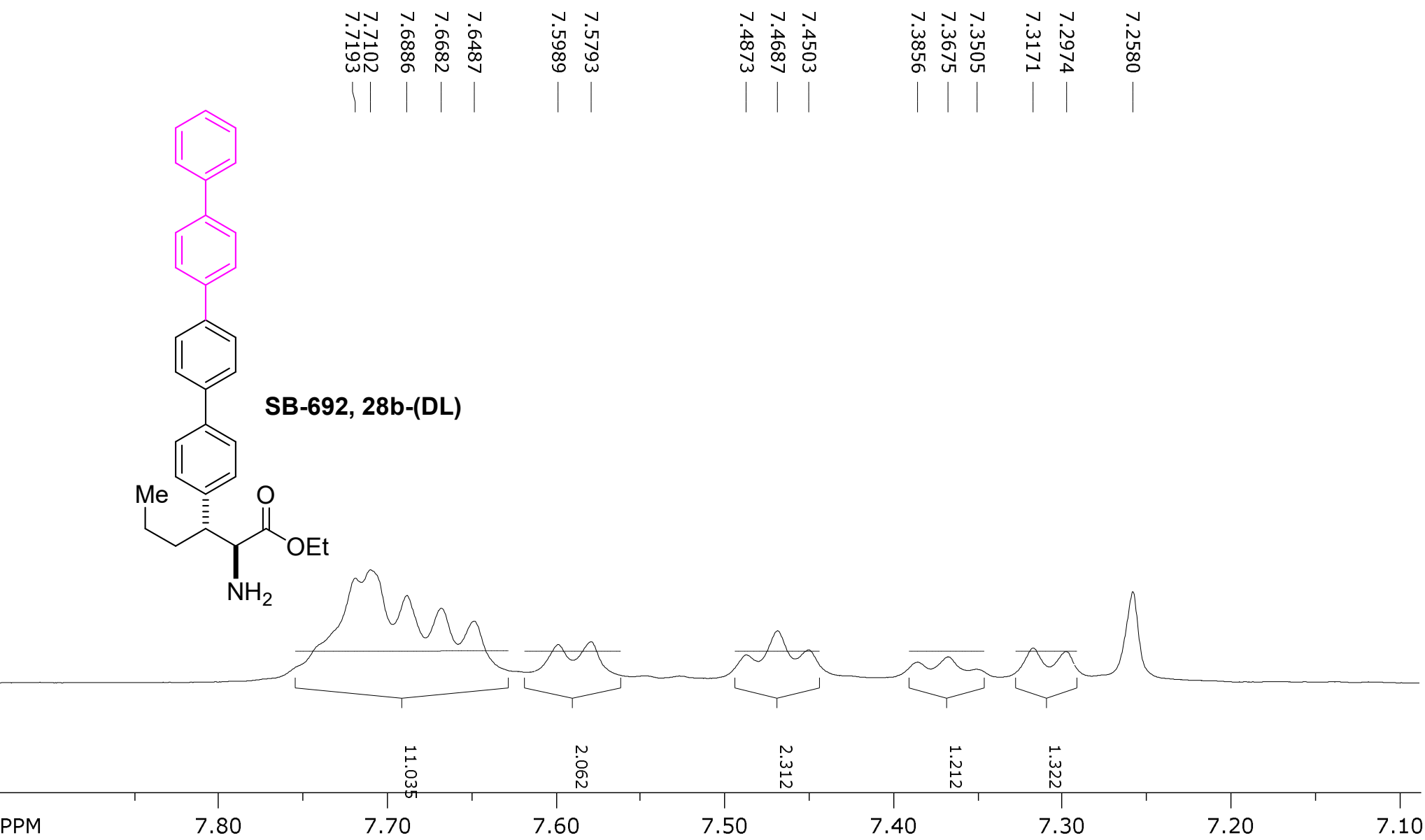
134.298 —

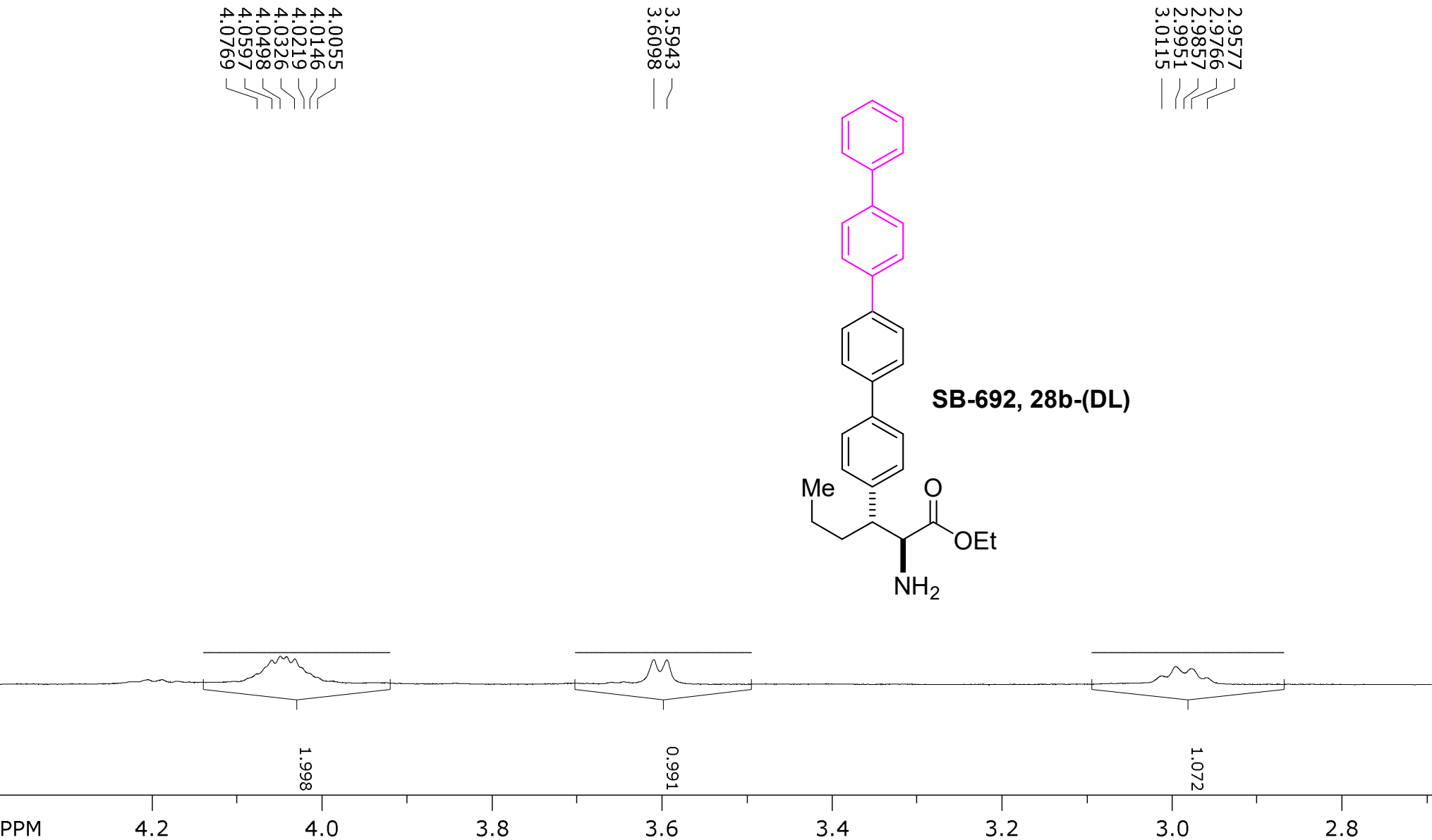
131.674 —

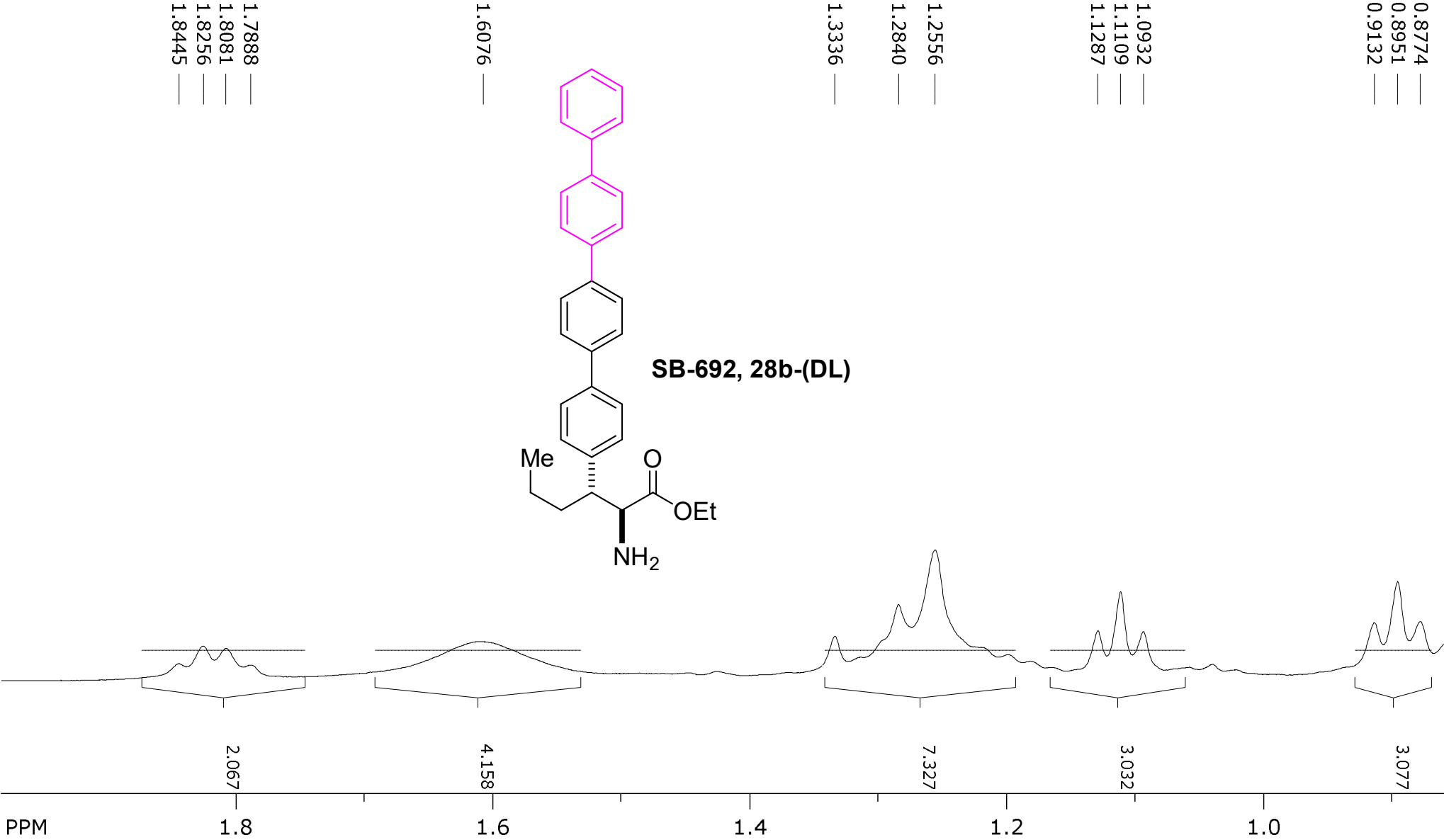
128.808 —
128.988 —
127.526 —
127.355 —
127.329 —
127.316 —
127.023 —
126.893 —
123.693 —

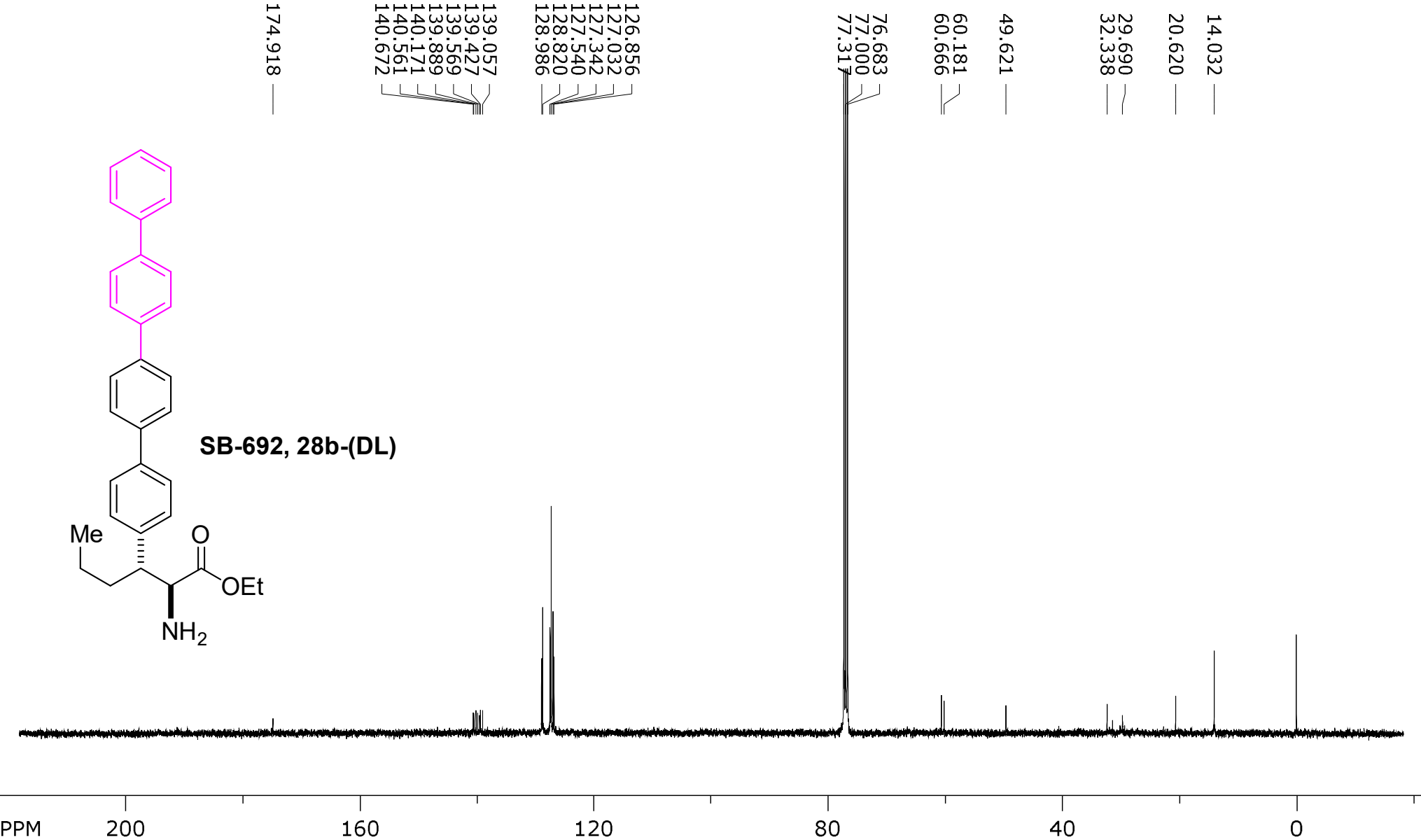


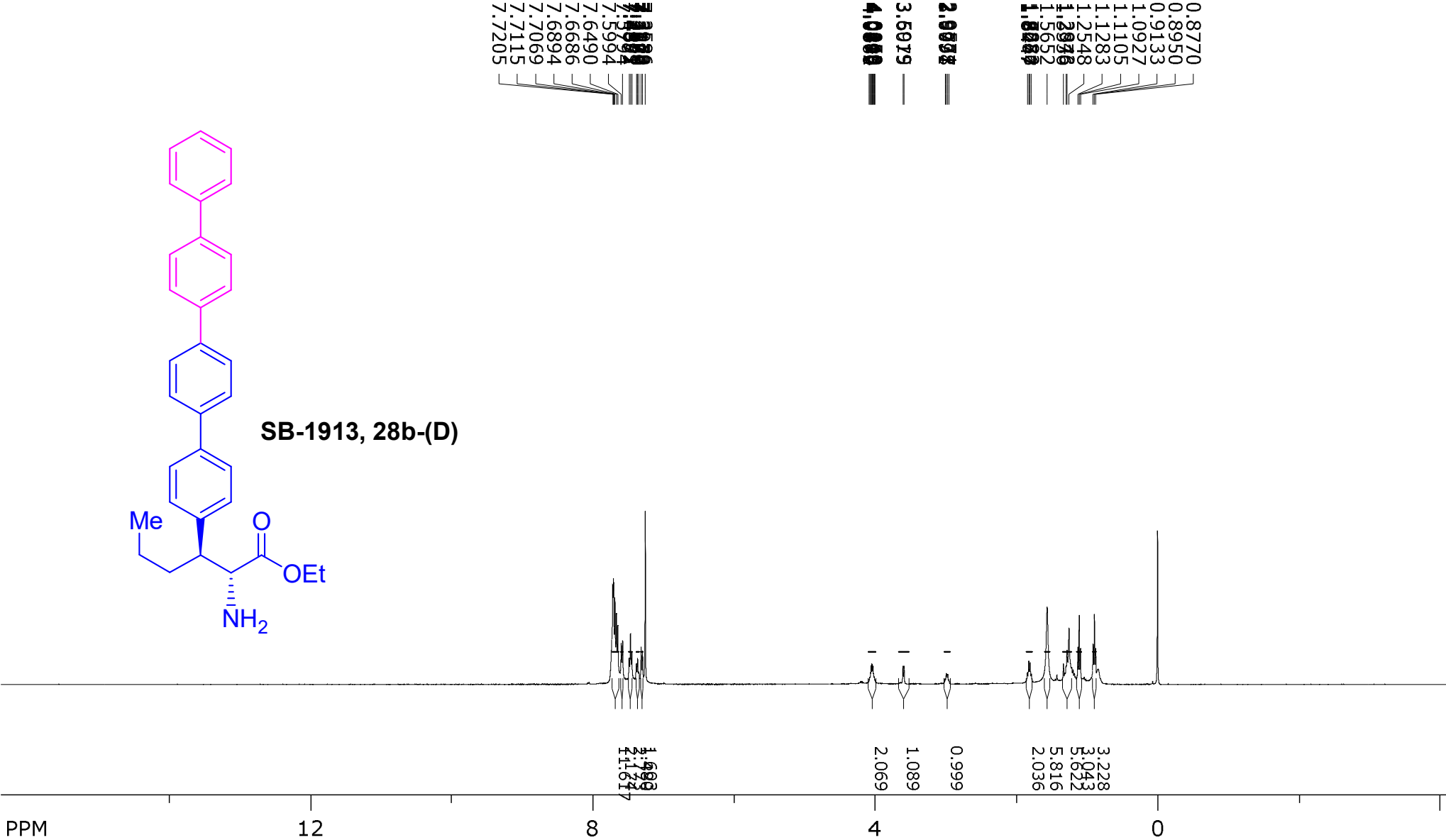


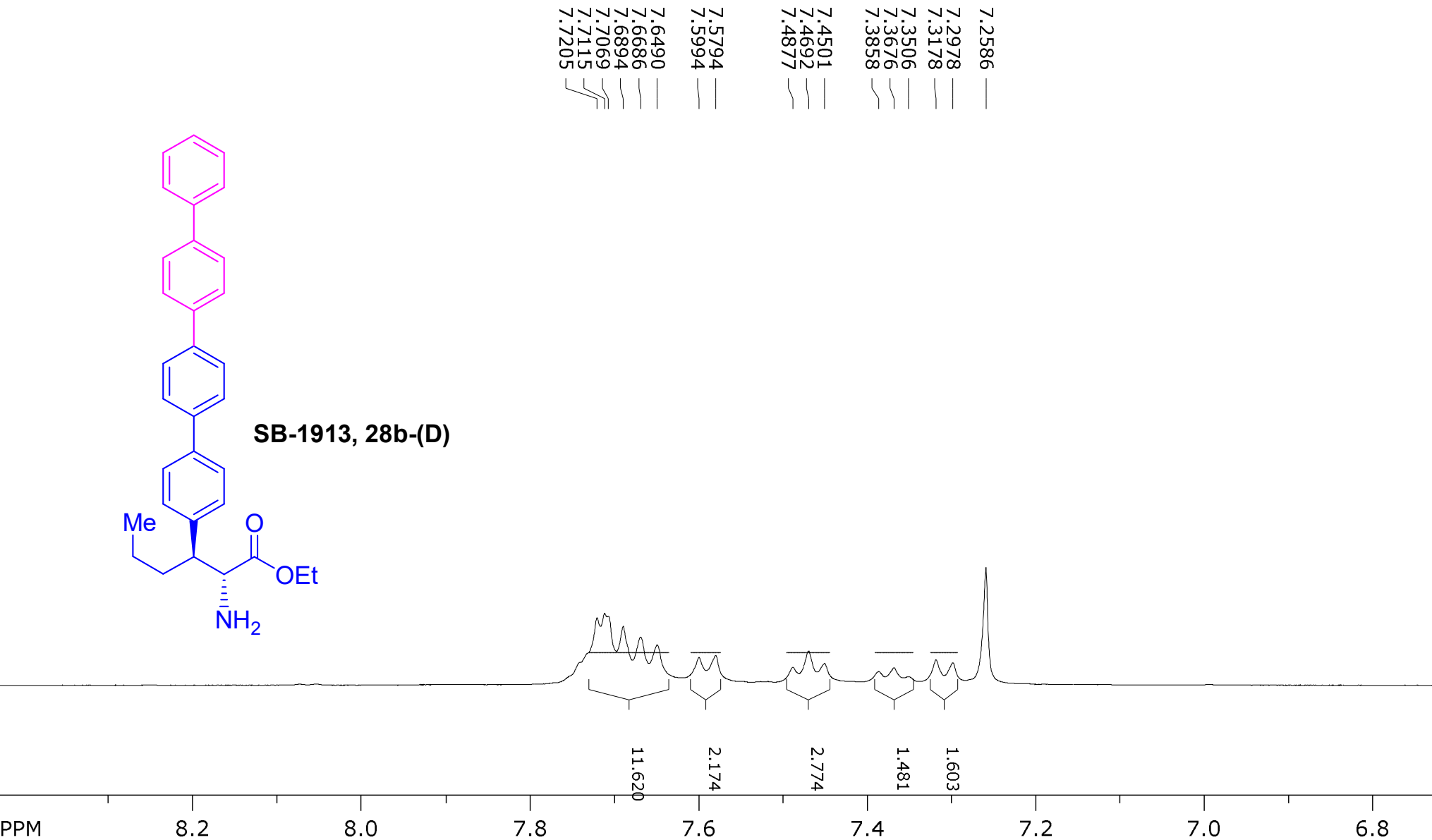


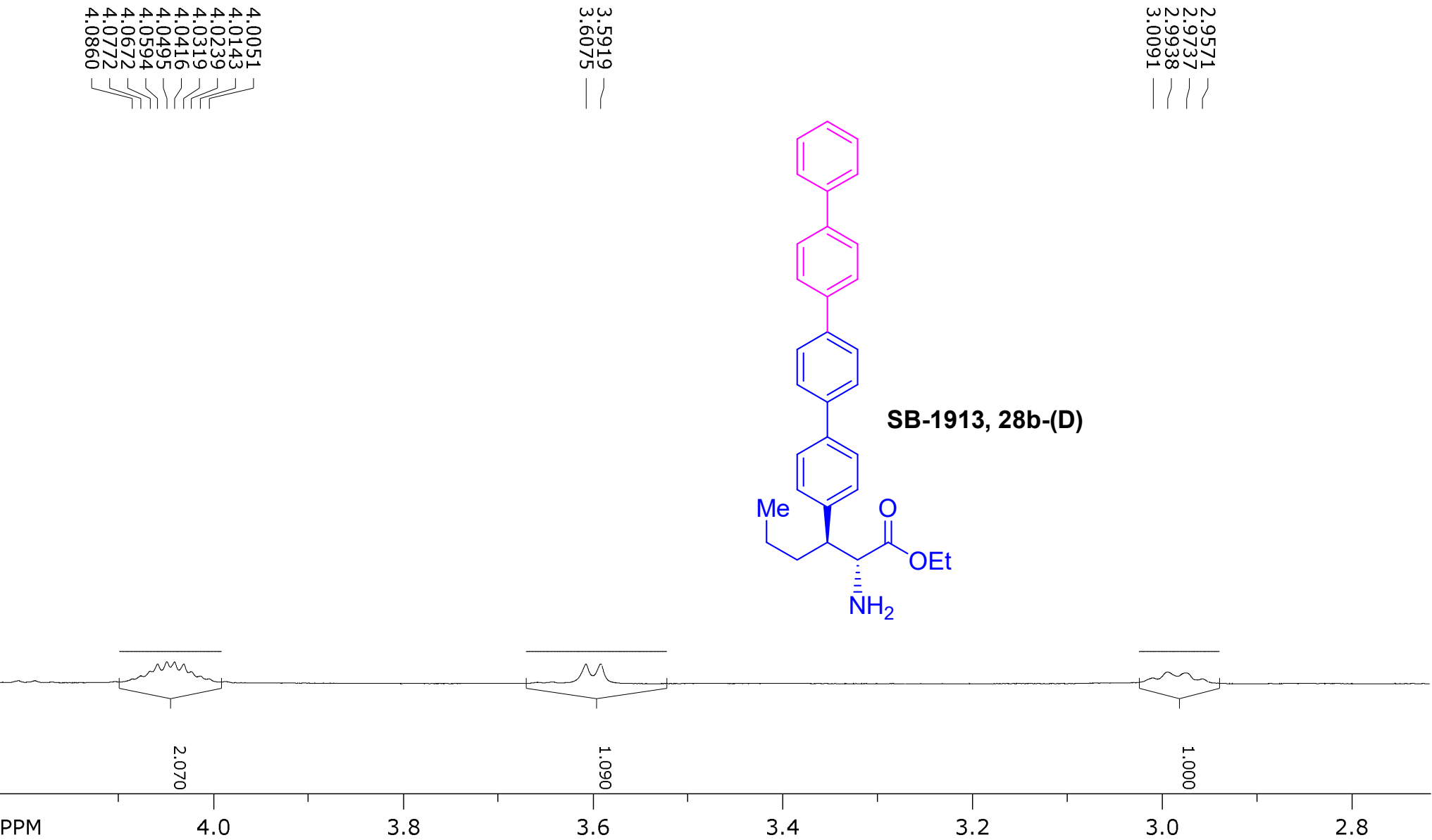


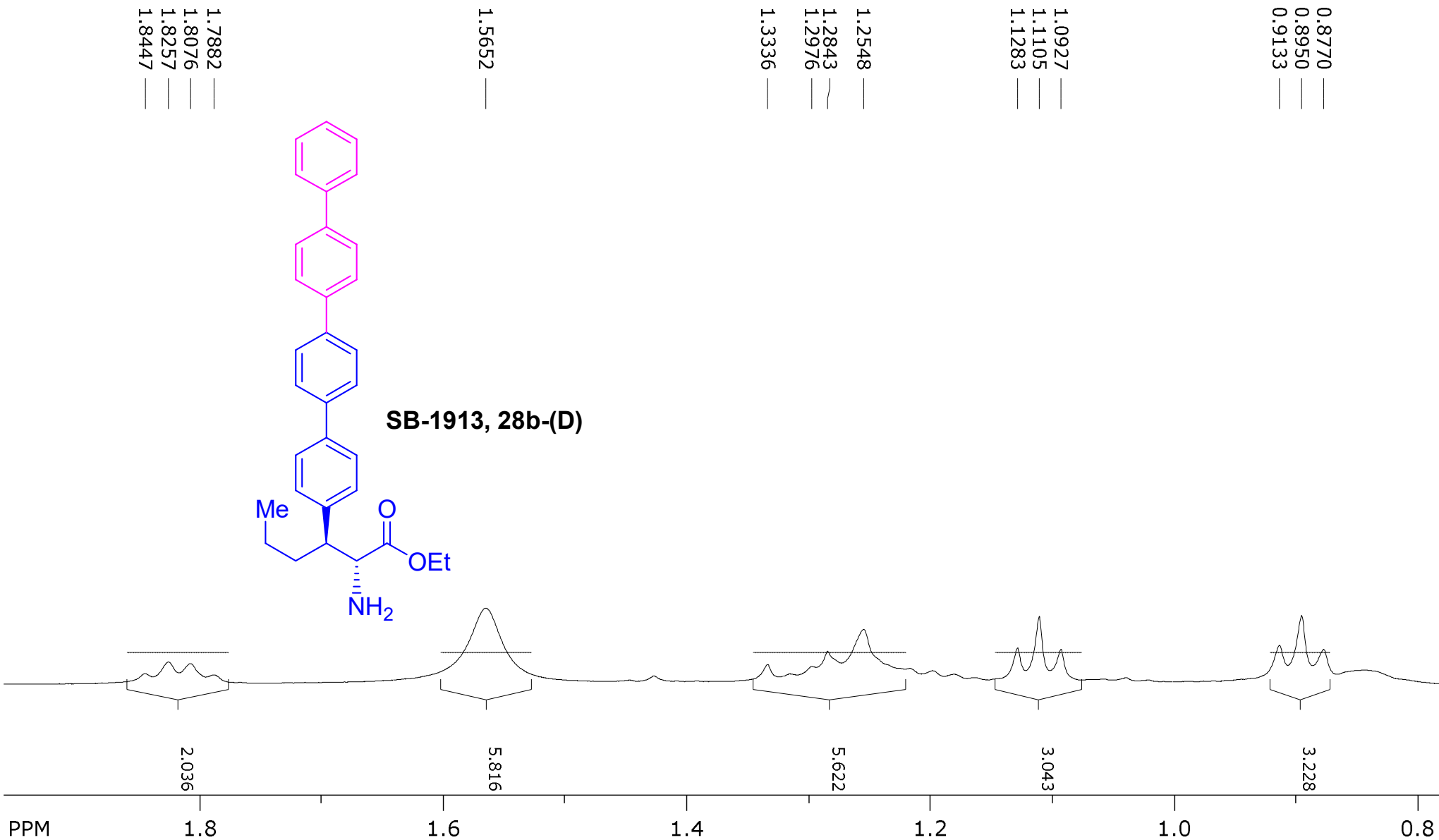


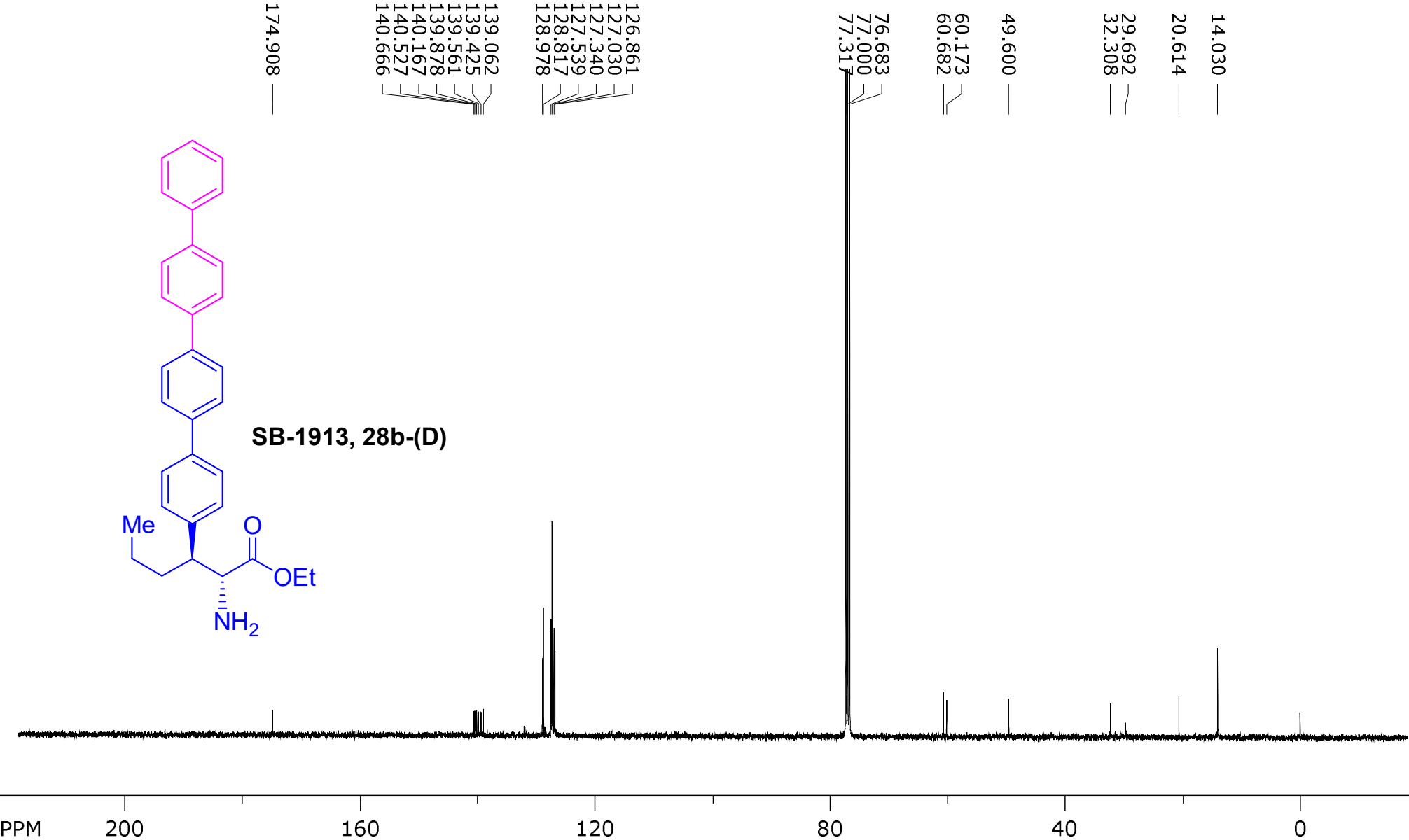


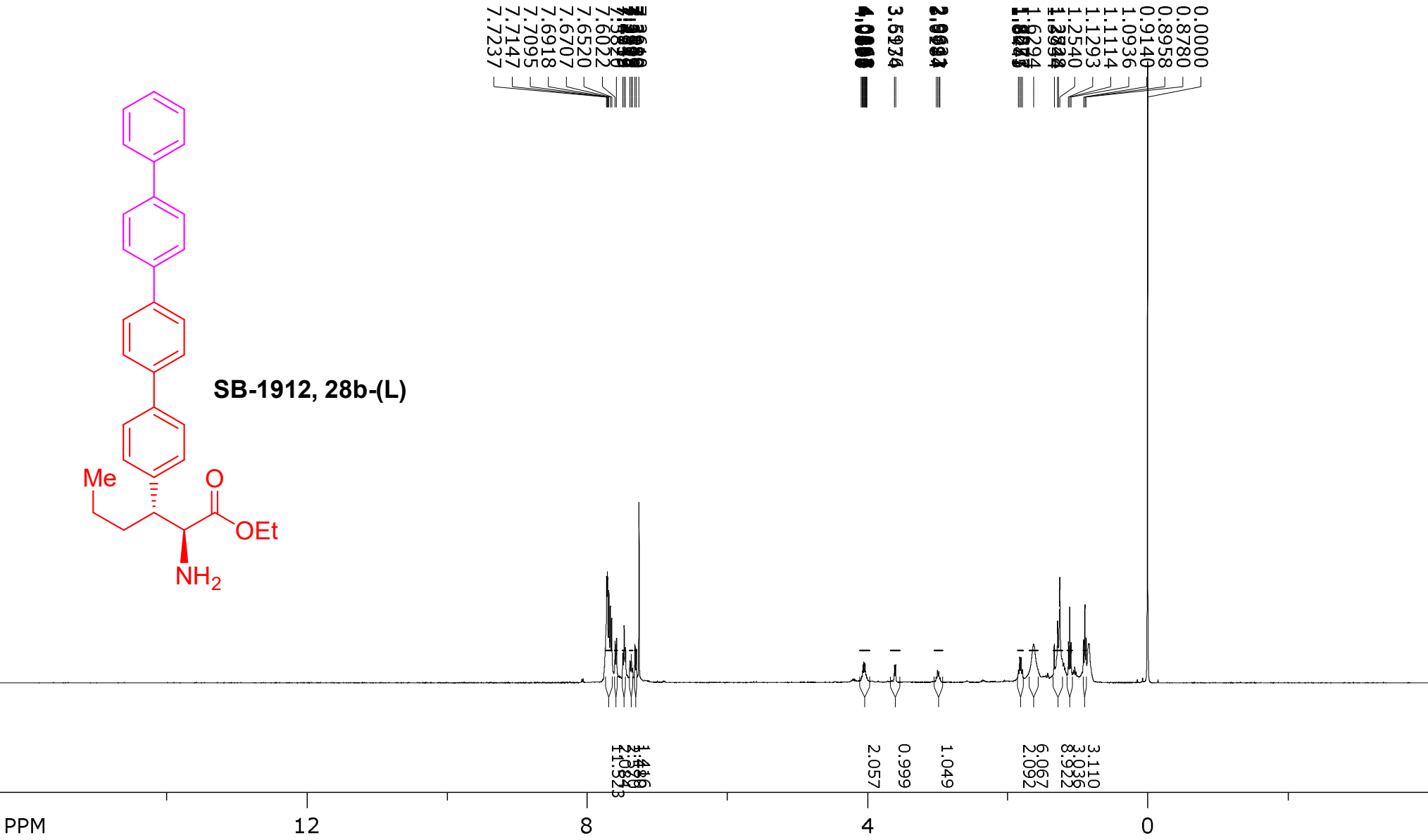


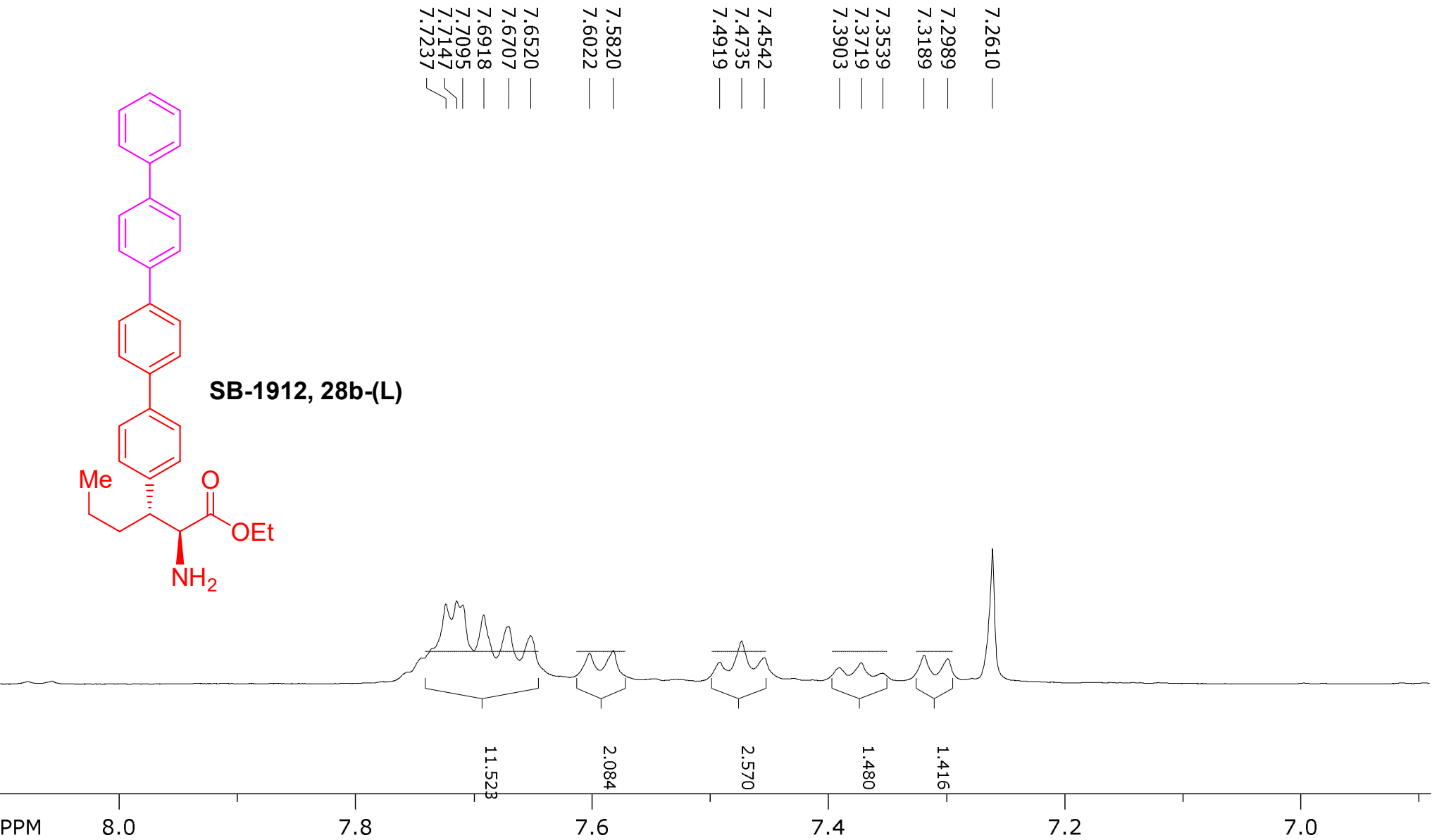


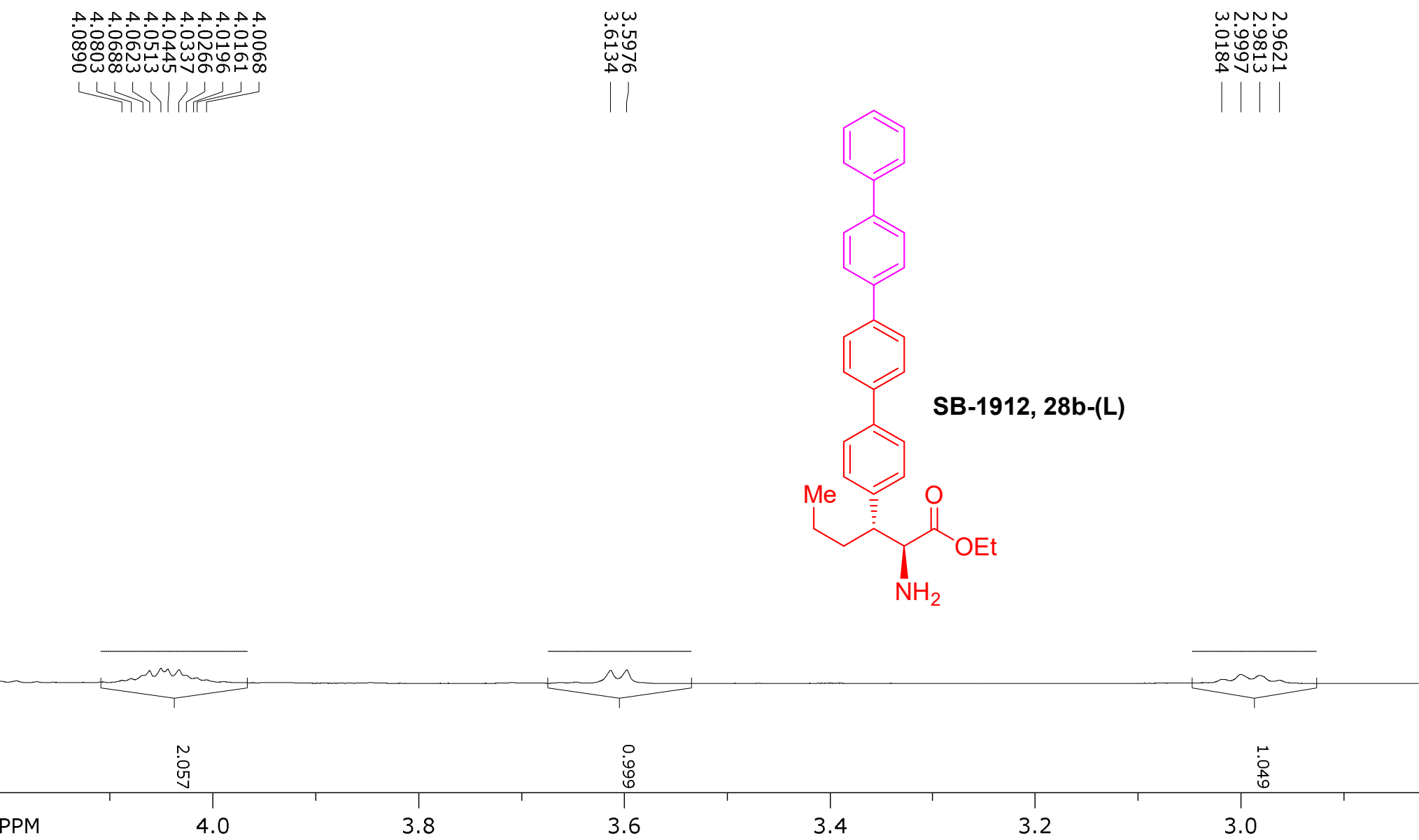


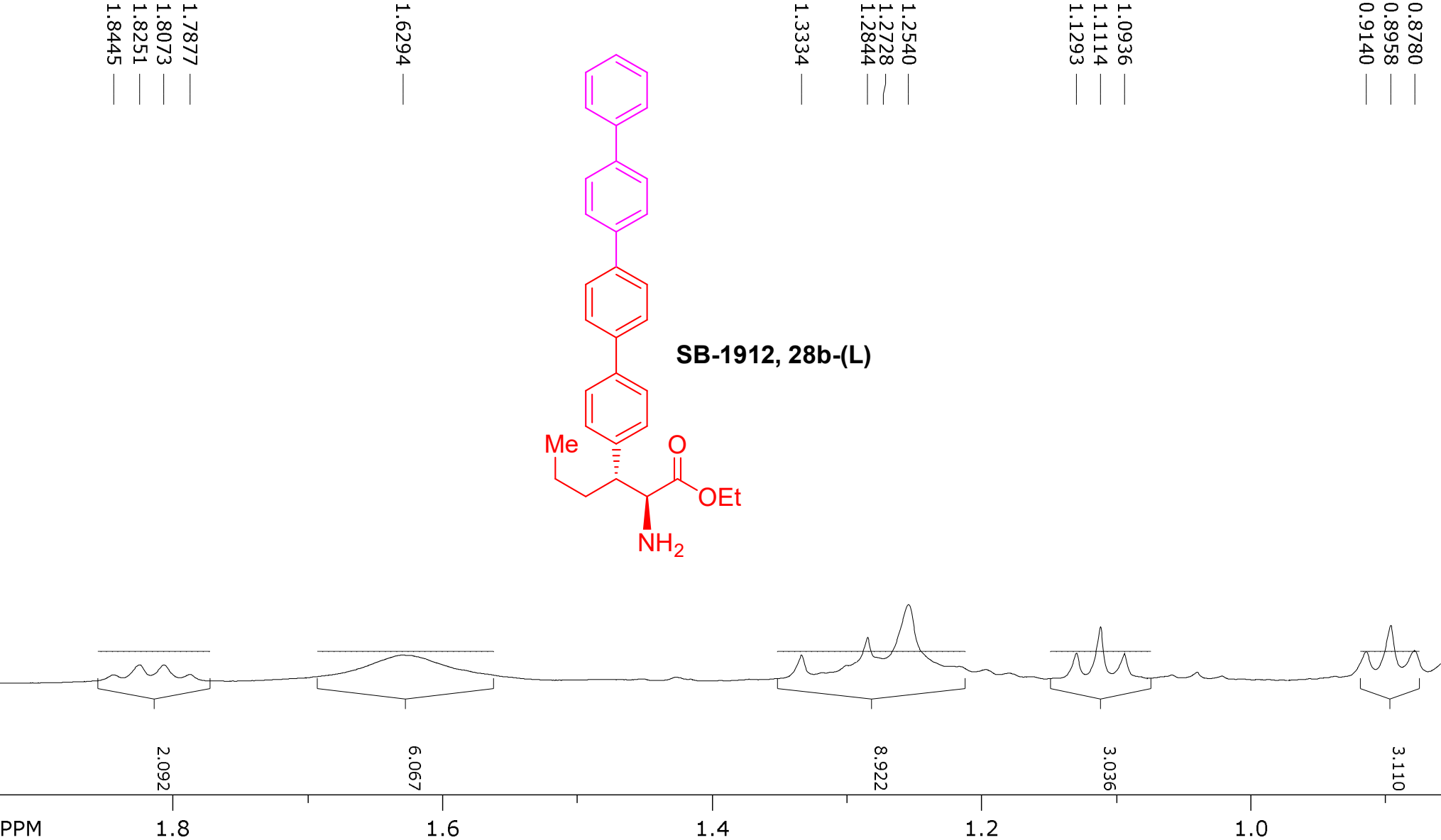


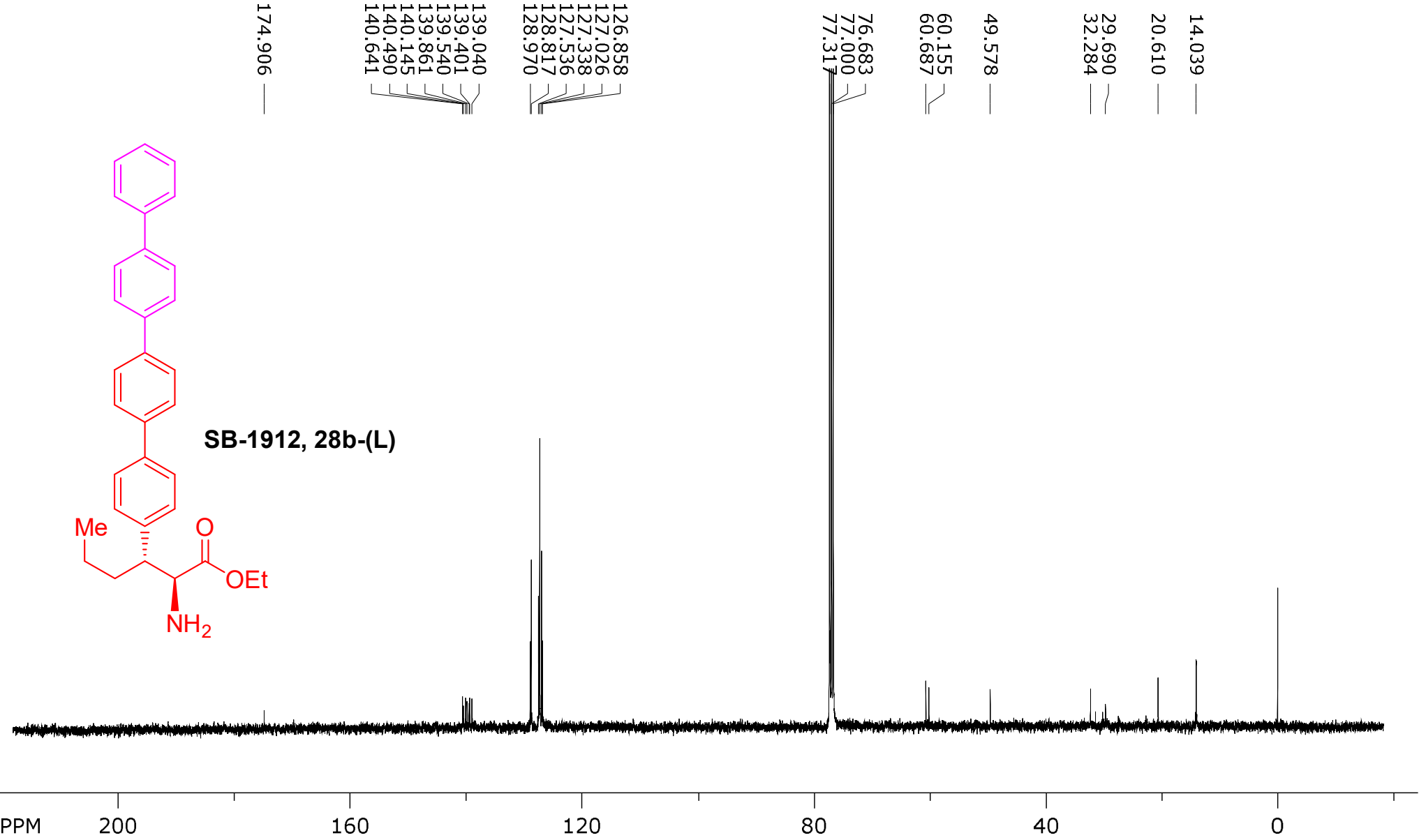


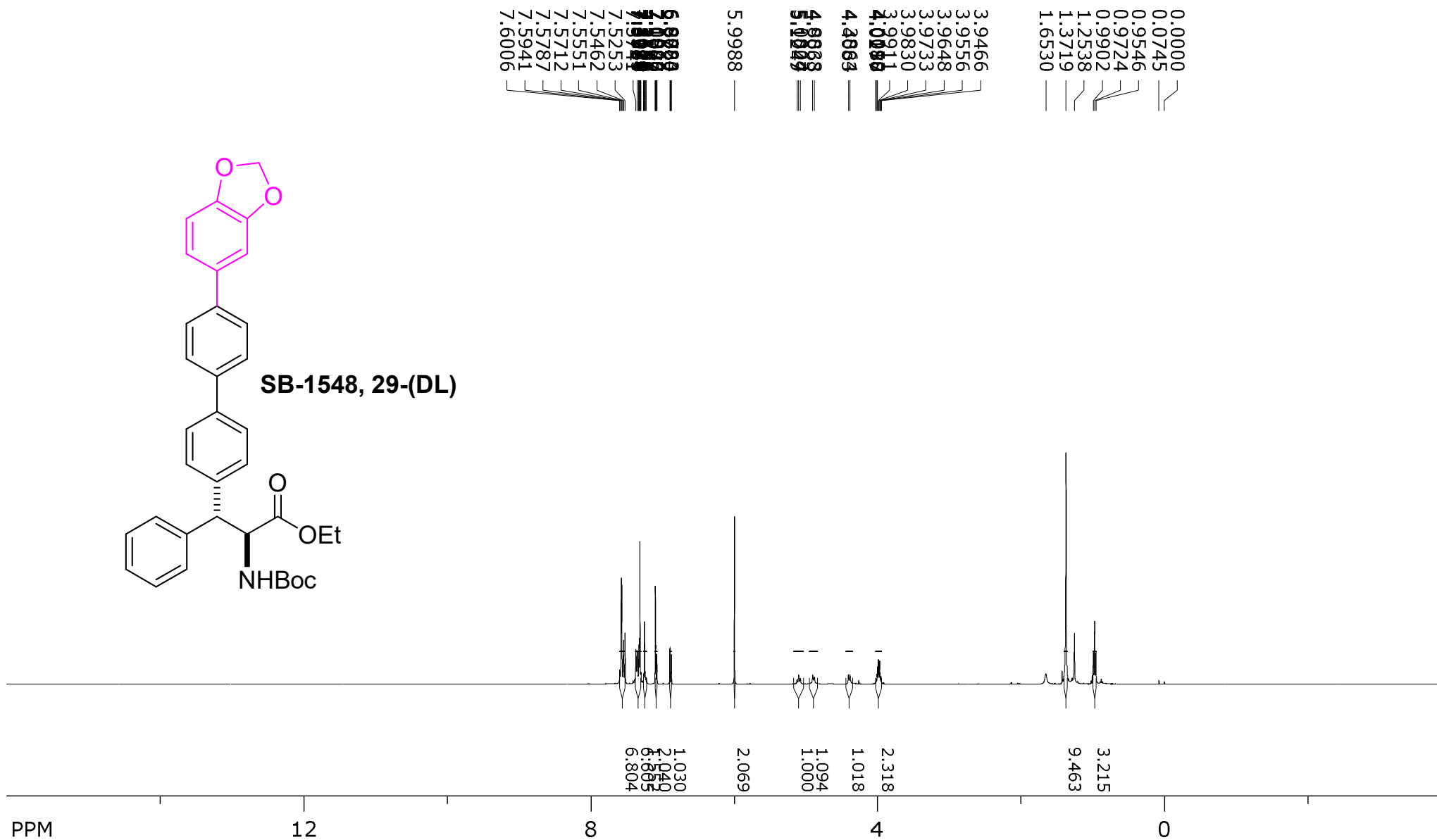
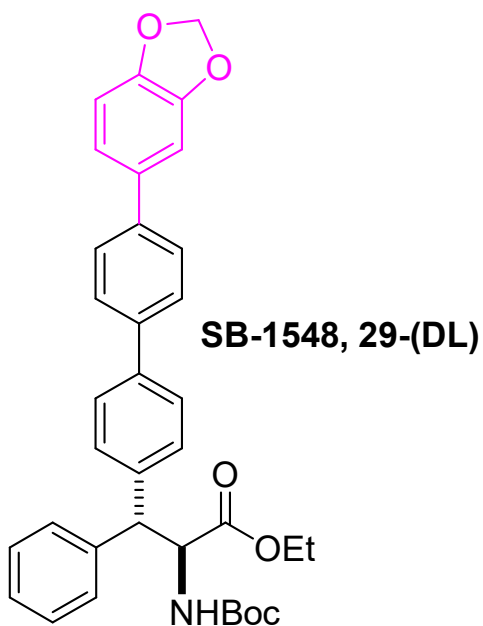




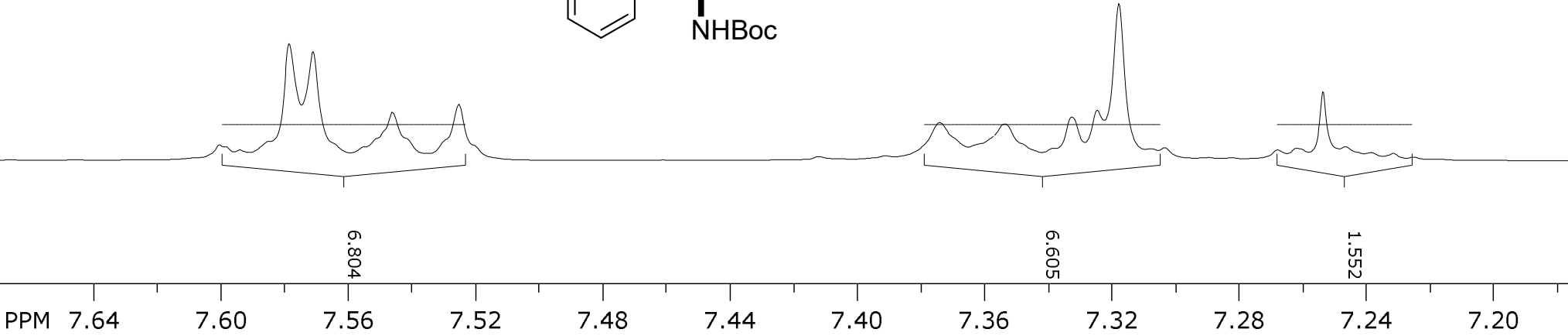
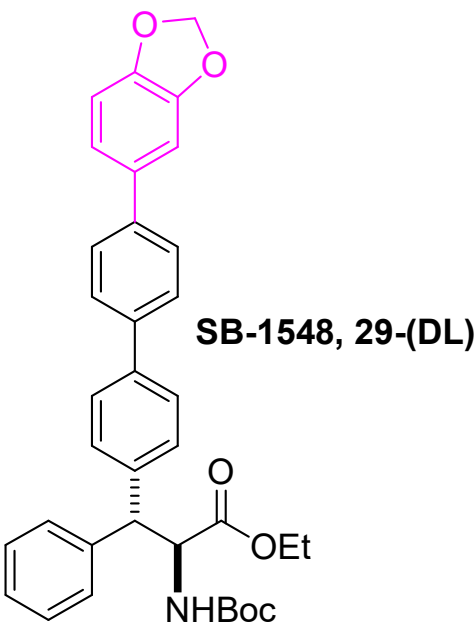


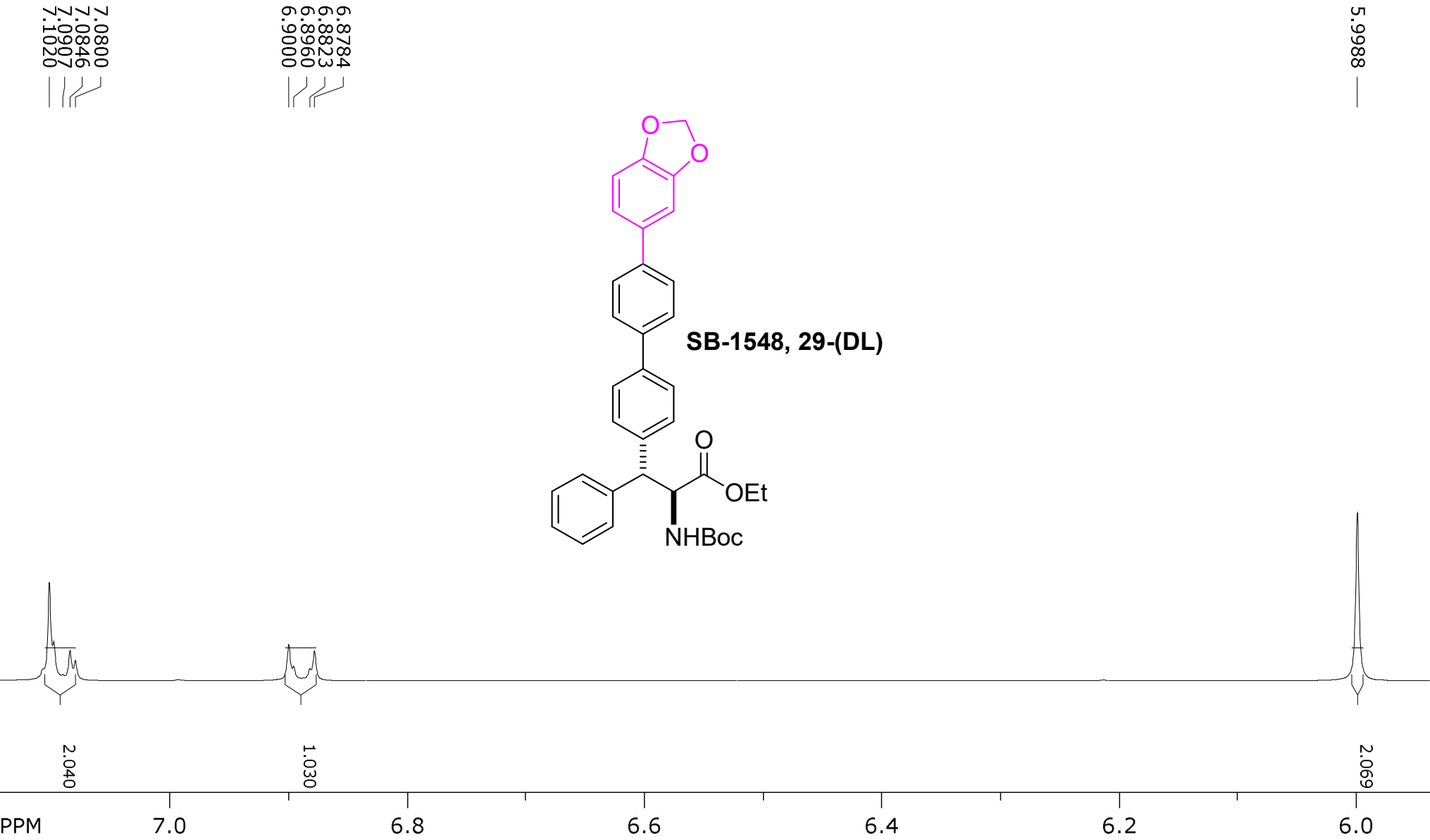


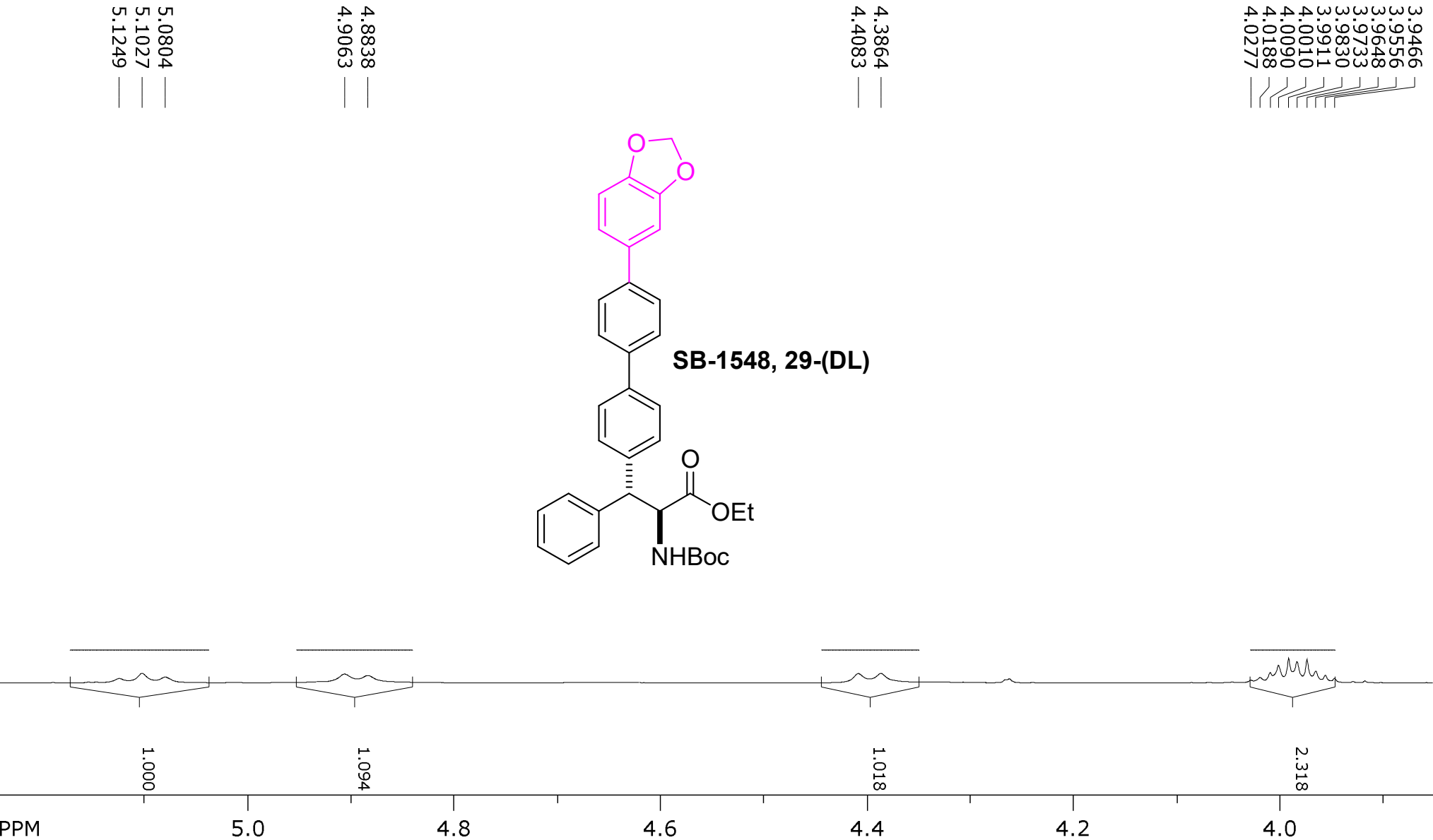


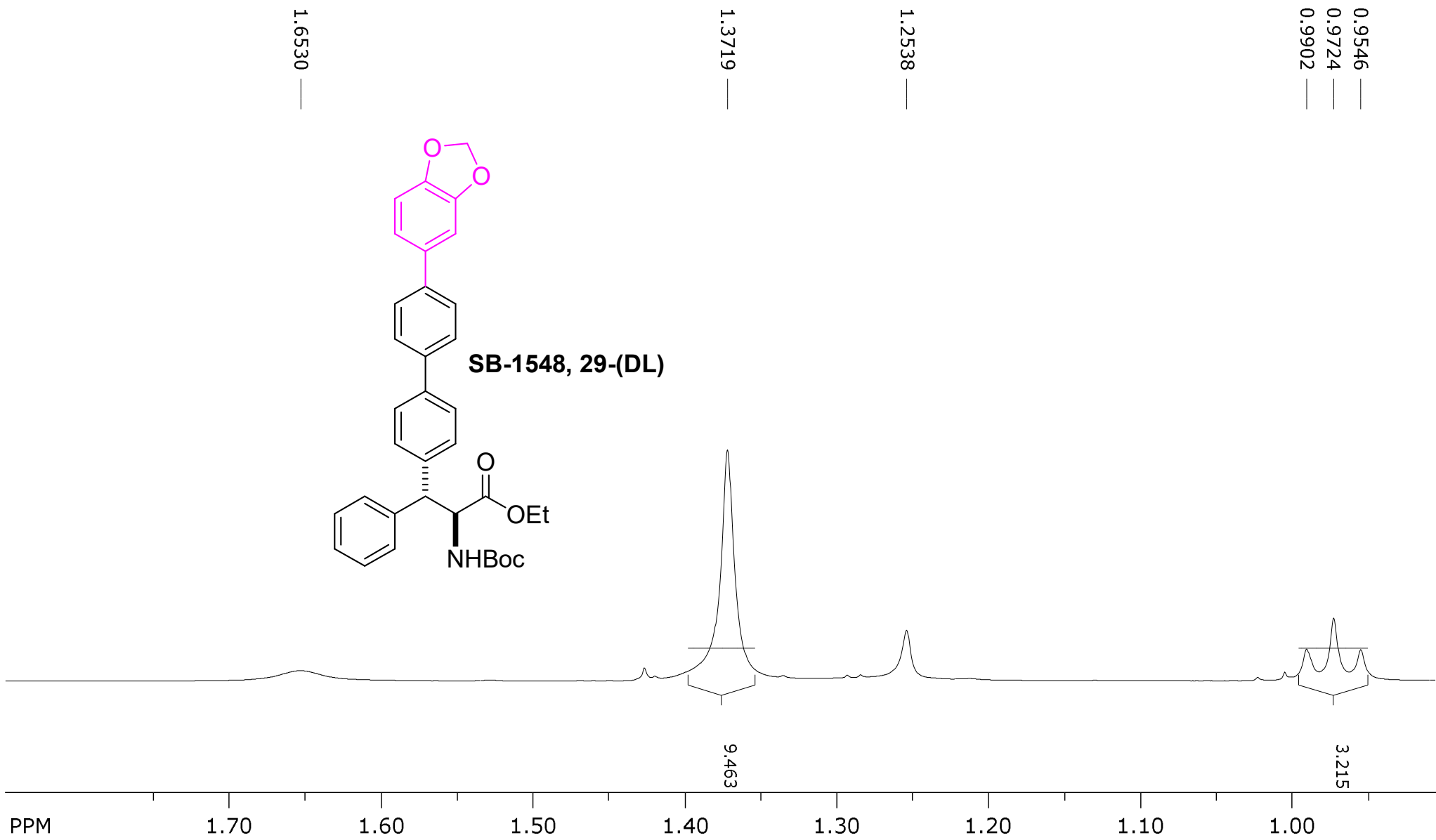


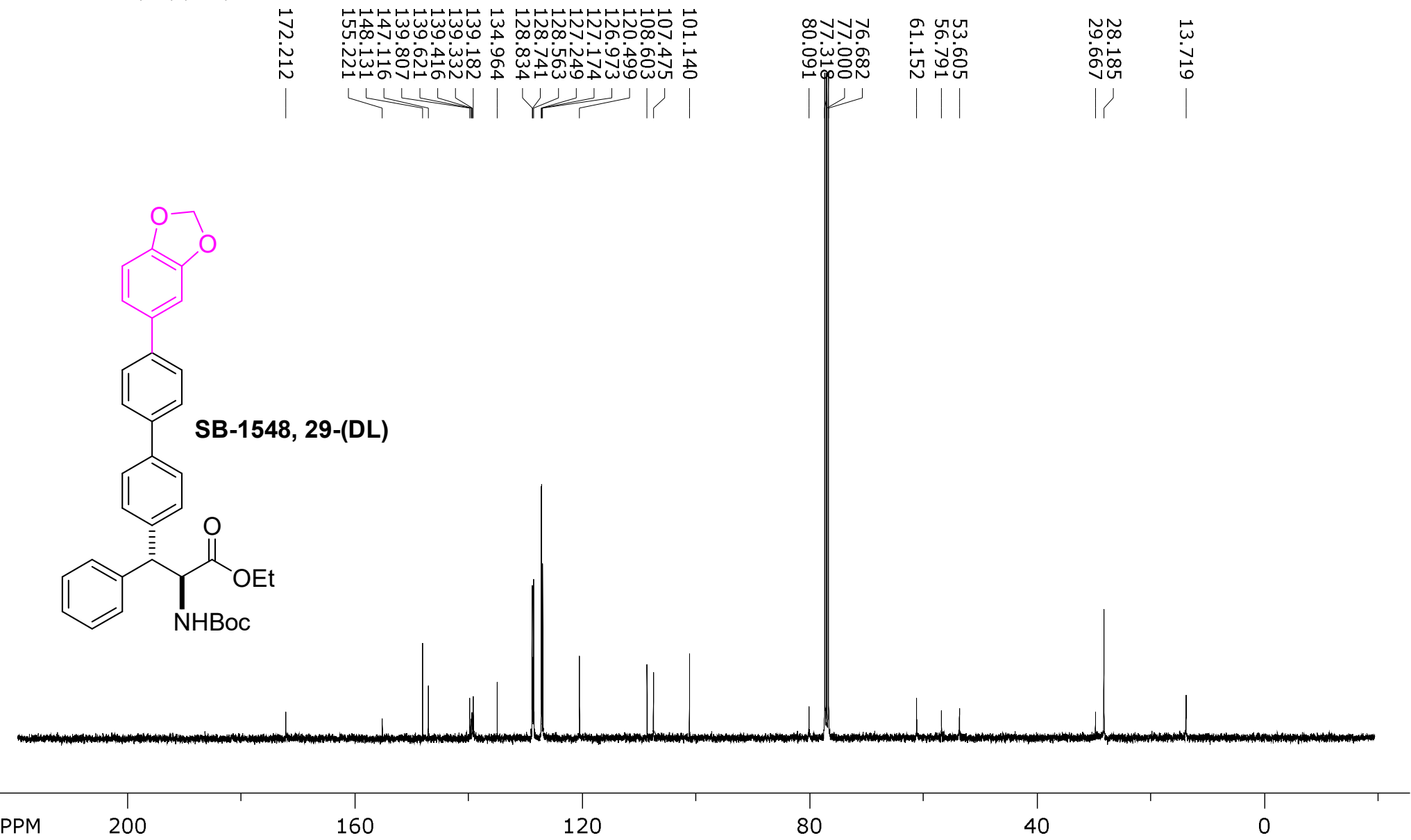
7.5941	7.5712	7.5551	7.5462	7.5253		7.3741	7.3535	7.3384	7.3326	7.3246	7.3177	7.3076	7.3032		7.2678	7.2618	7.2535	7.2464	7.2384	7.2315
—	—	—	—	—		—	—	—	—	—	—	—	—		—	—	—	—	—	—

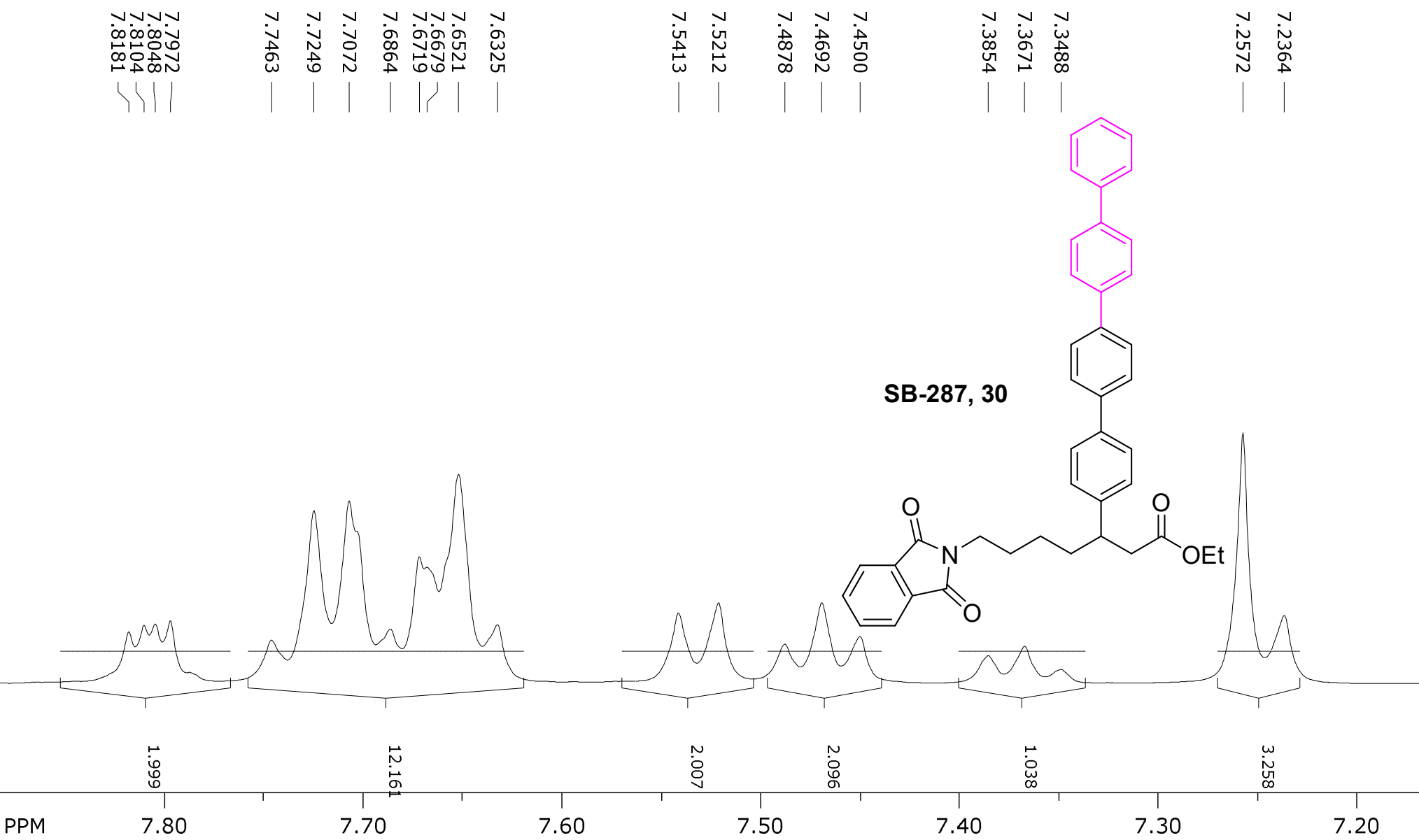


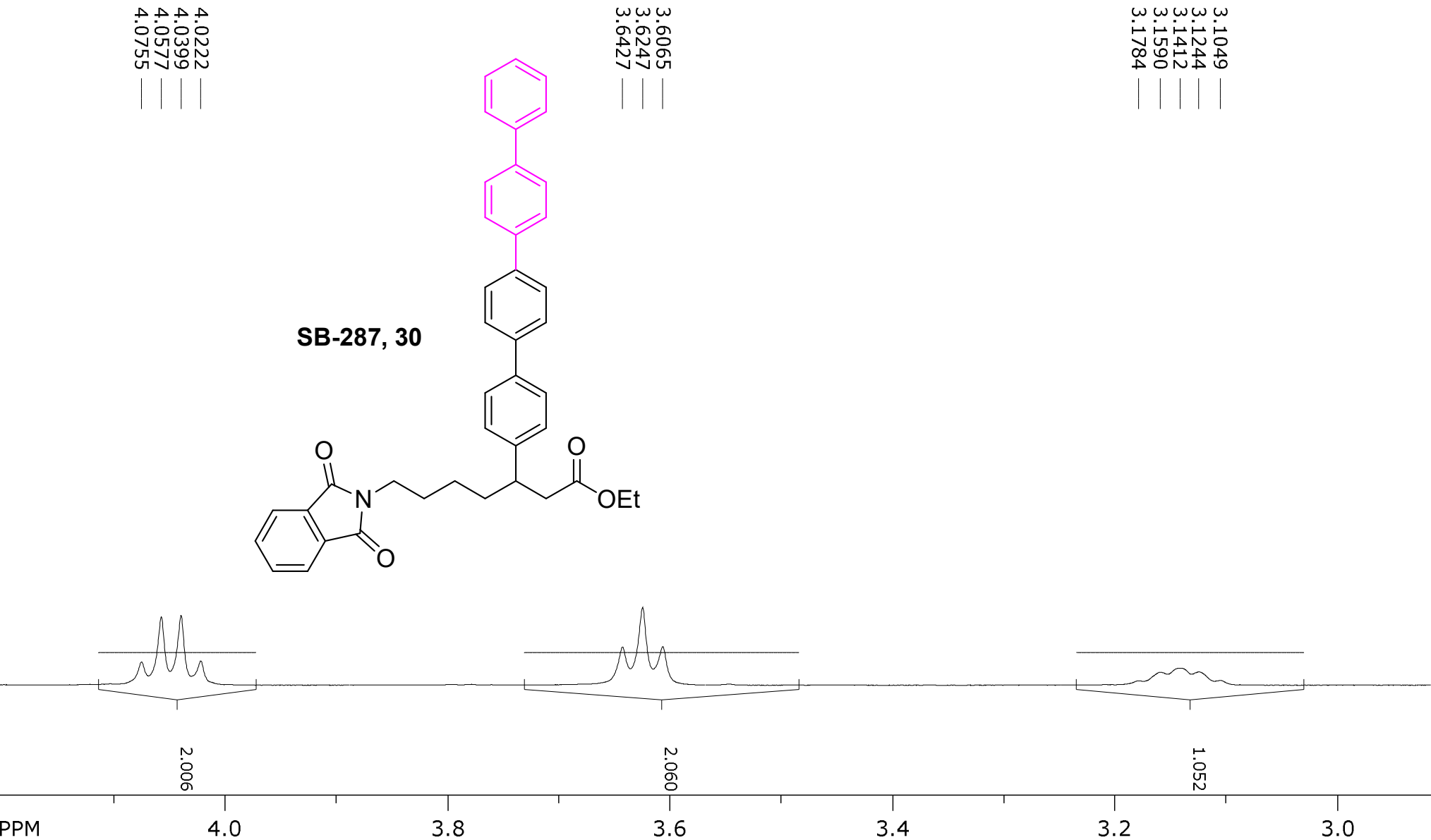


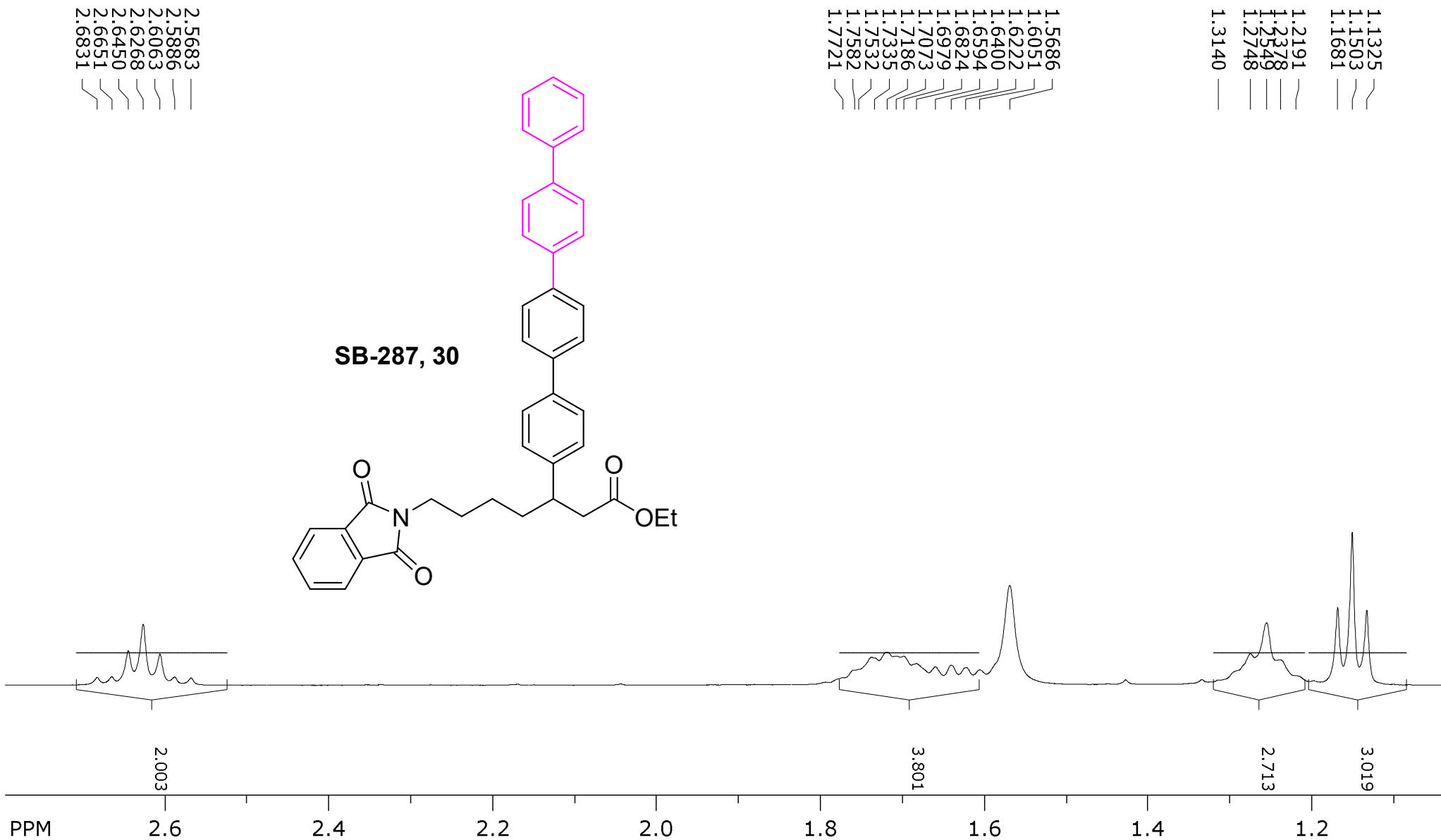


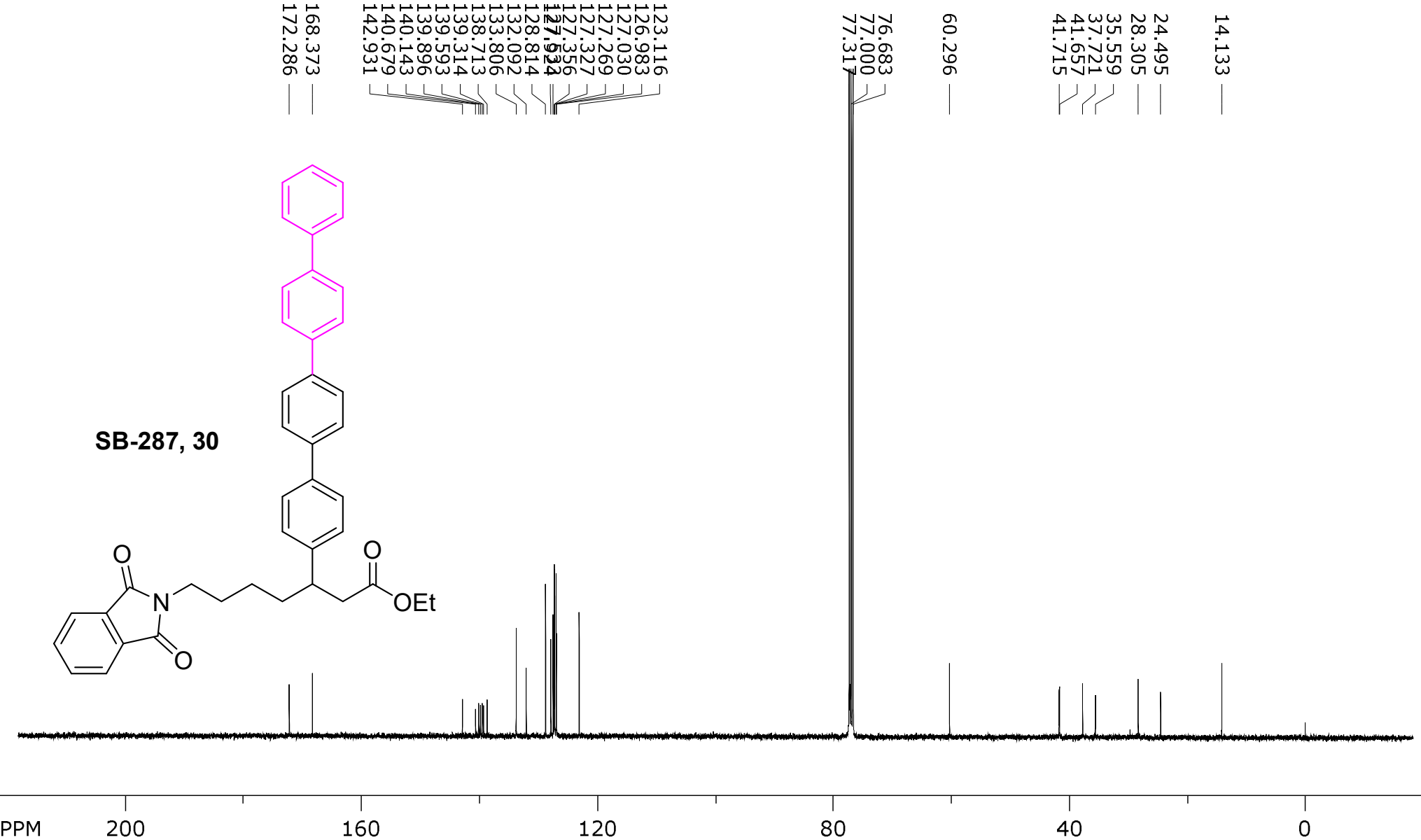


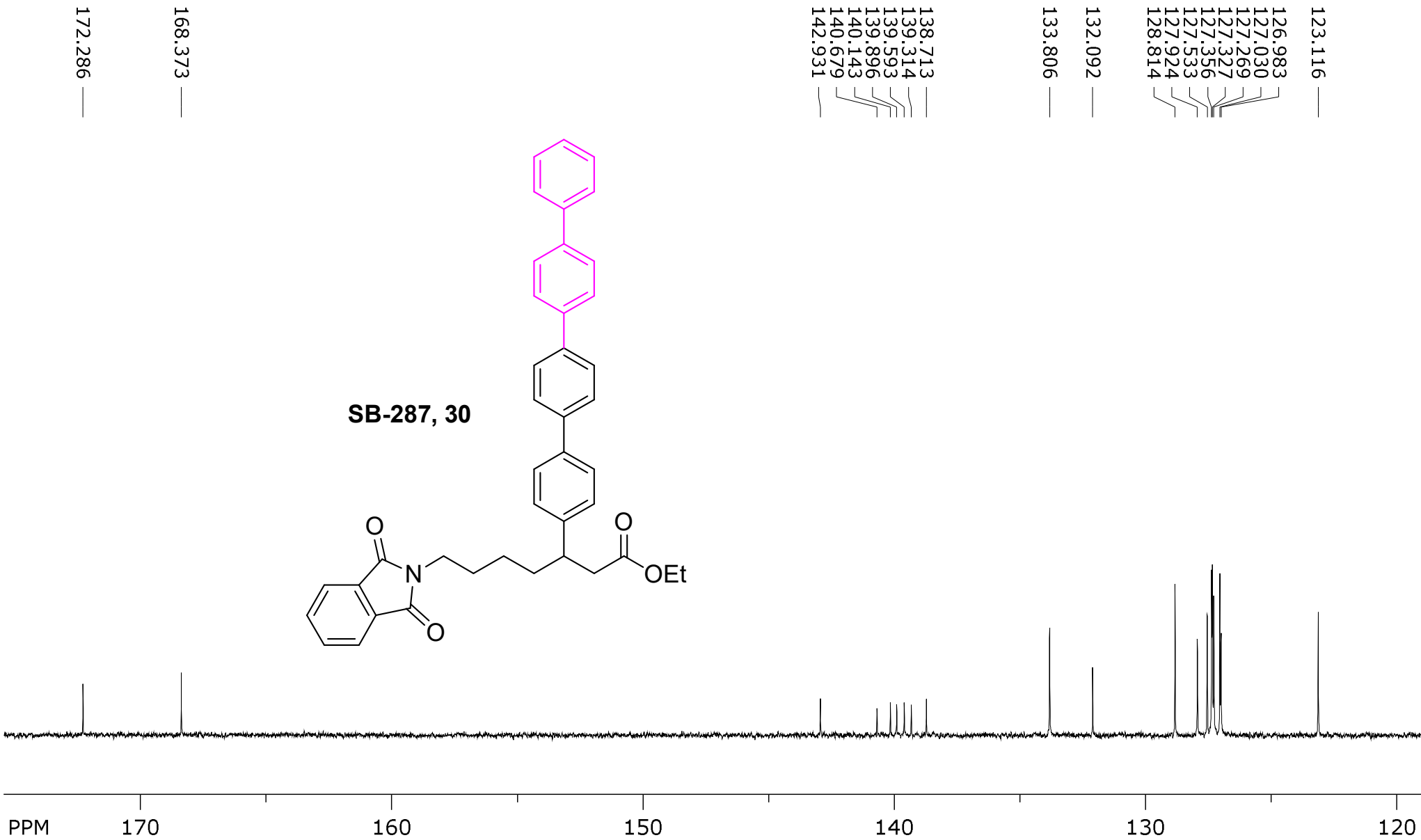


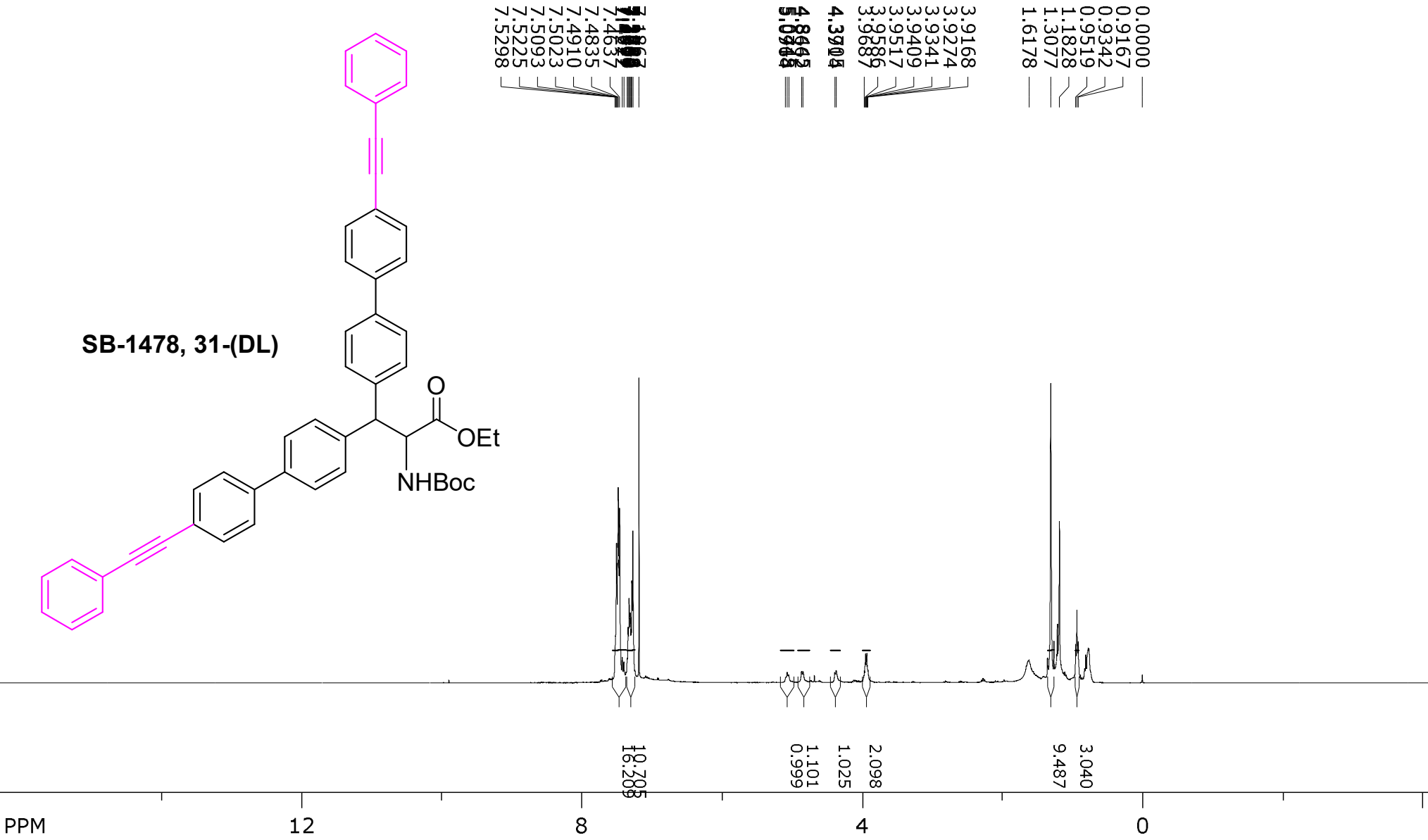


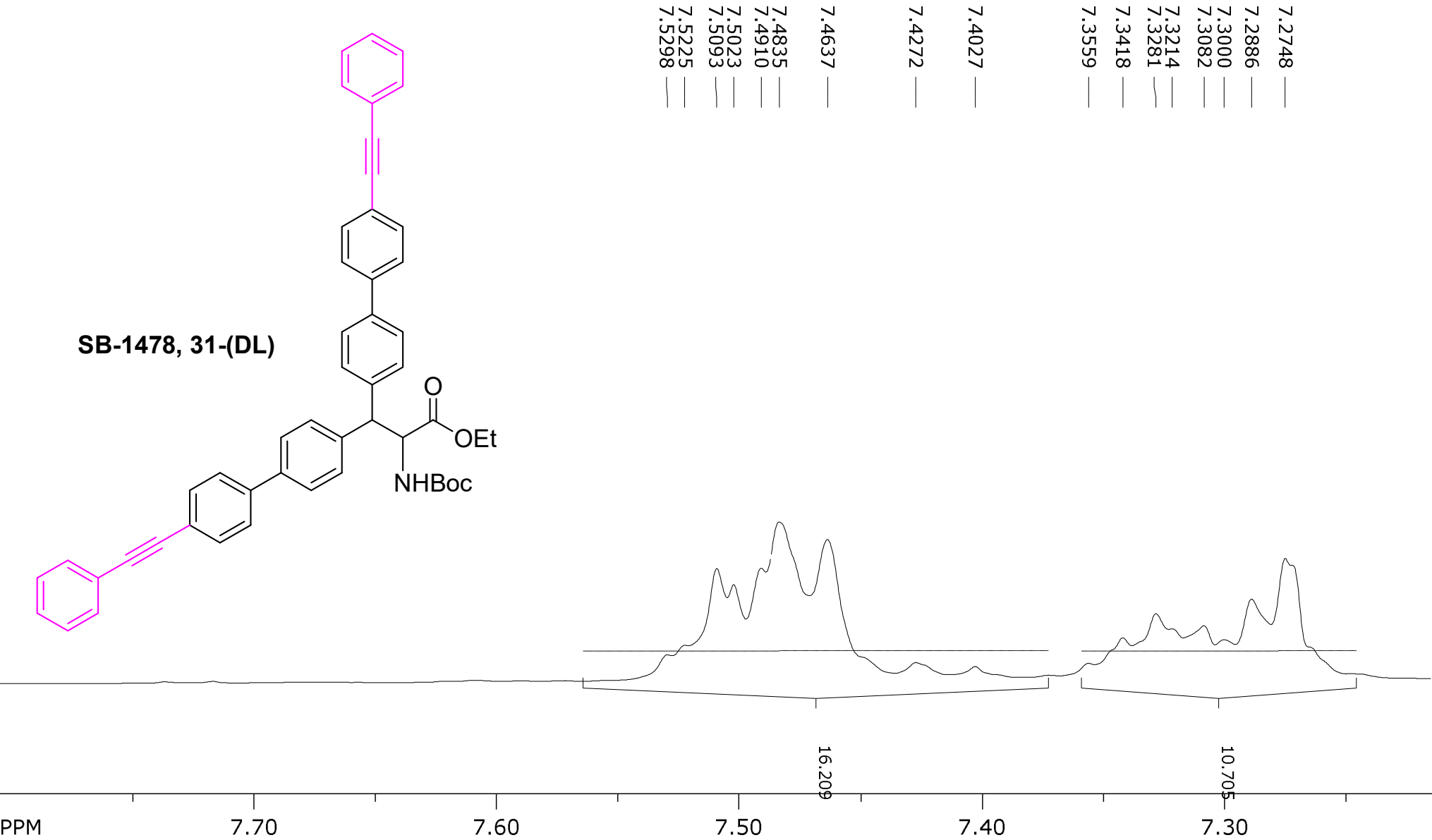


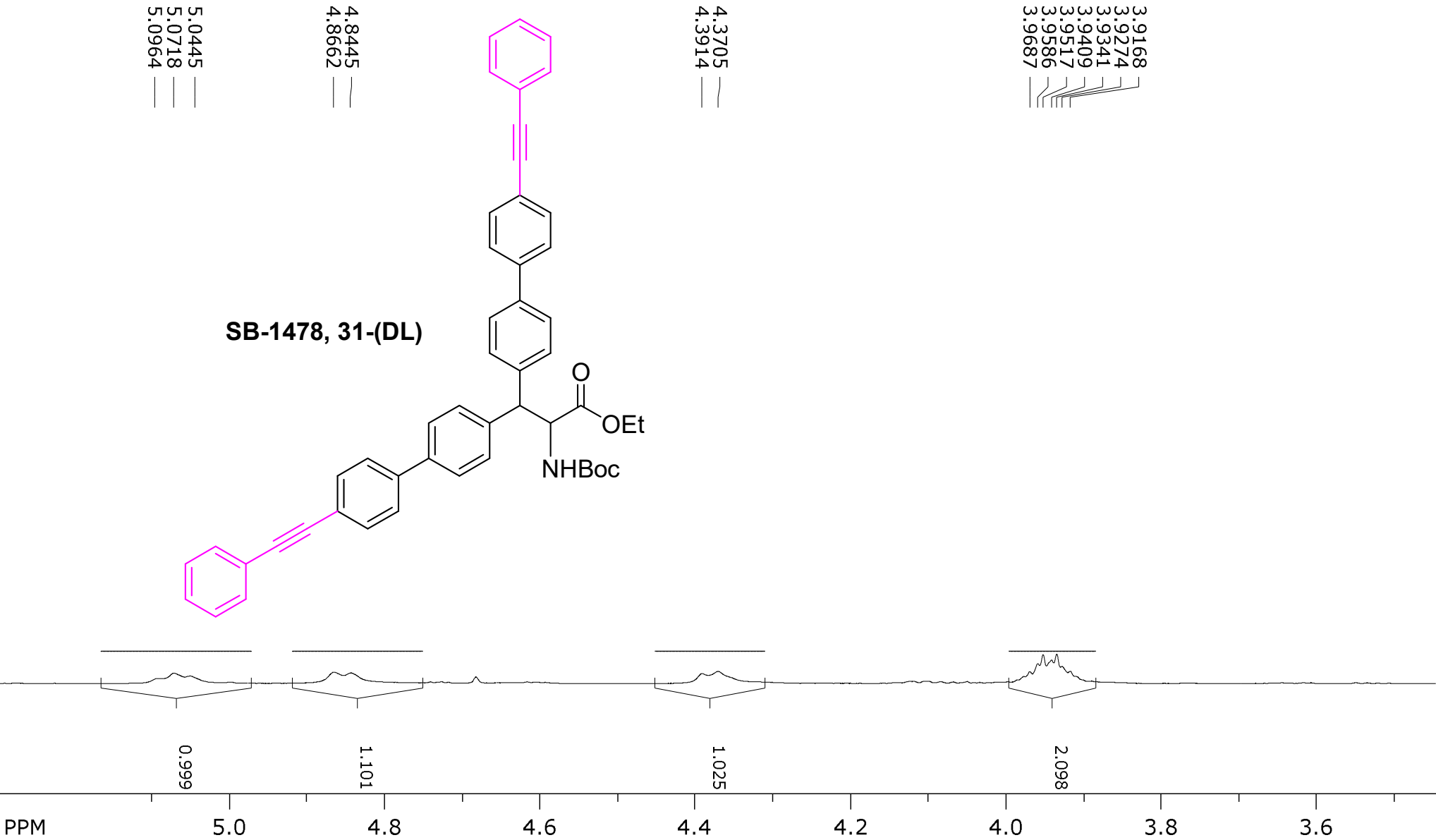


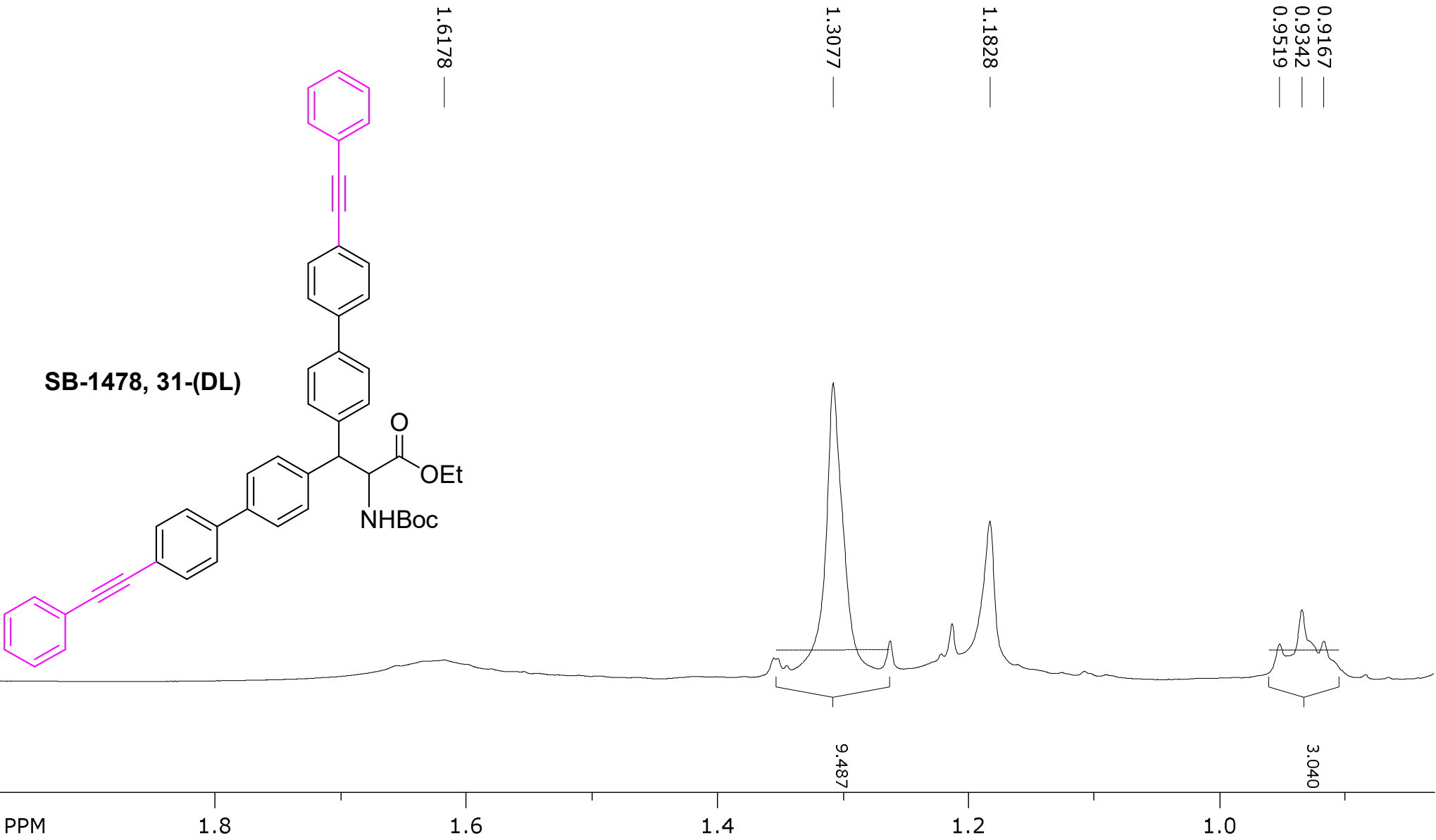


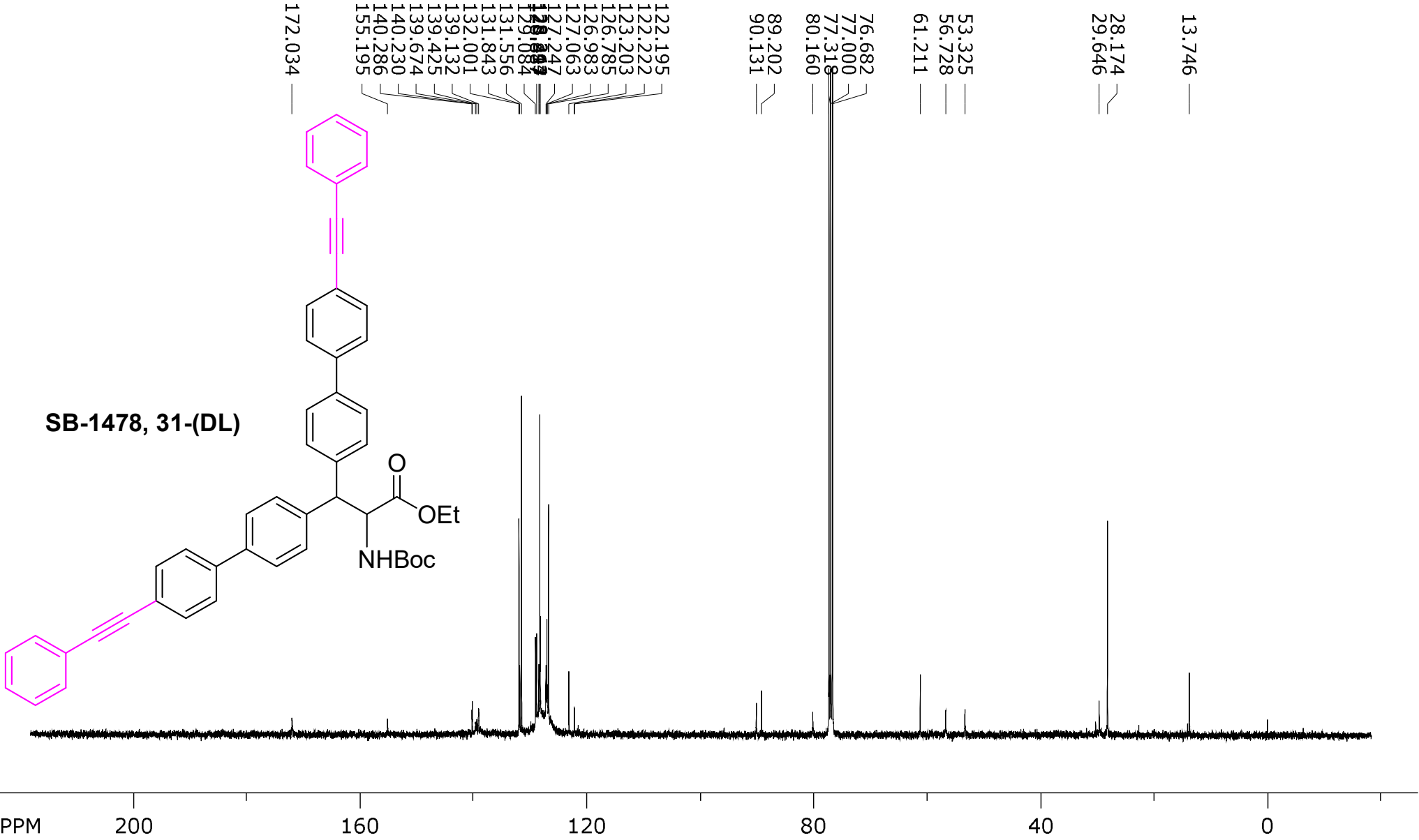


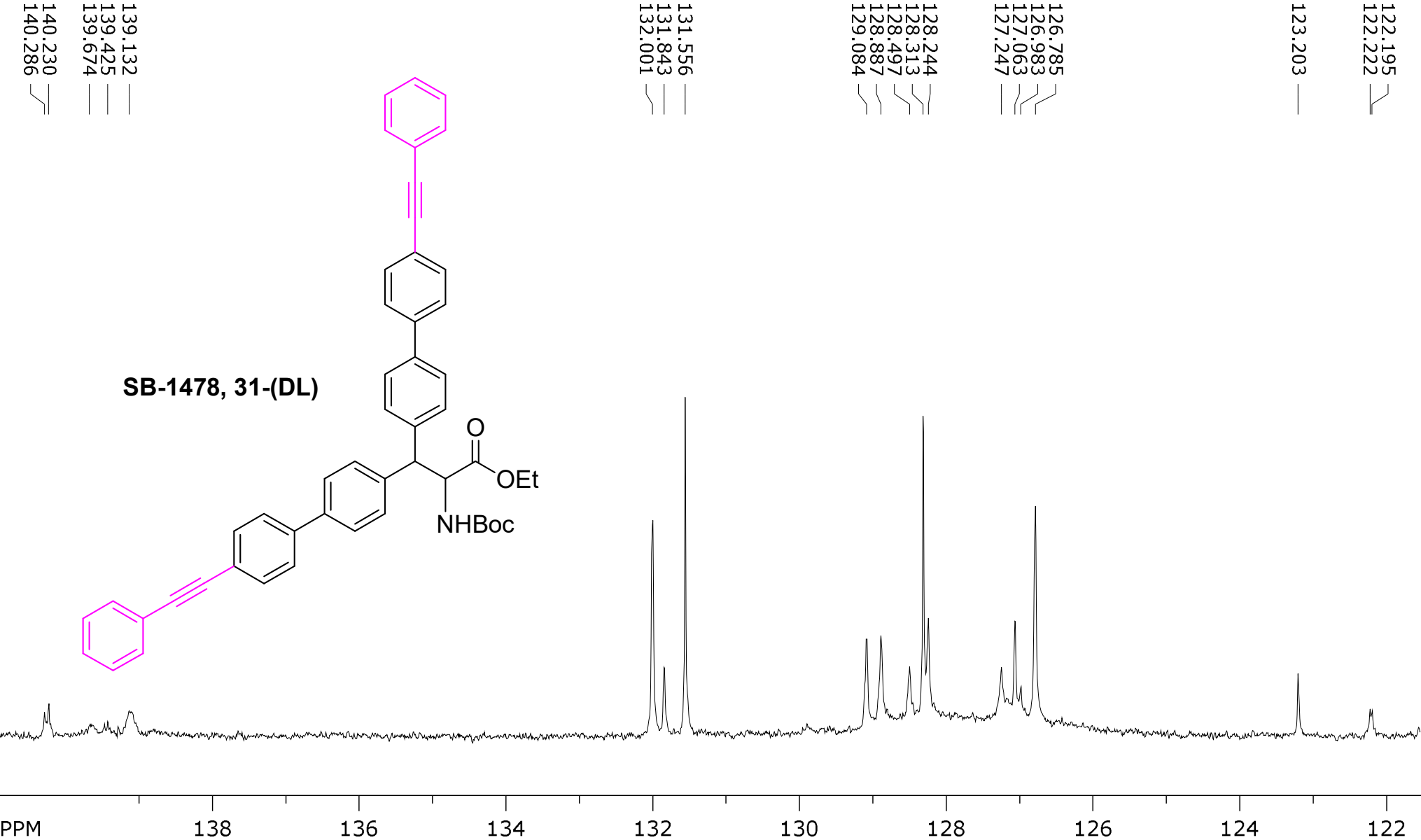


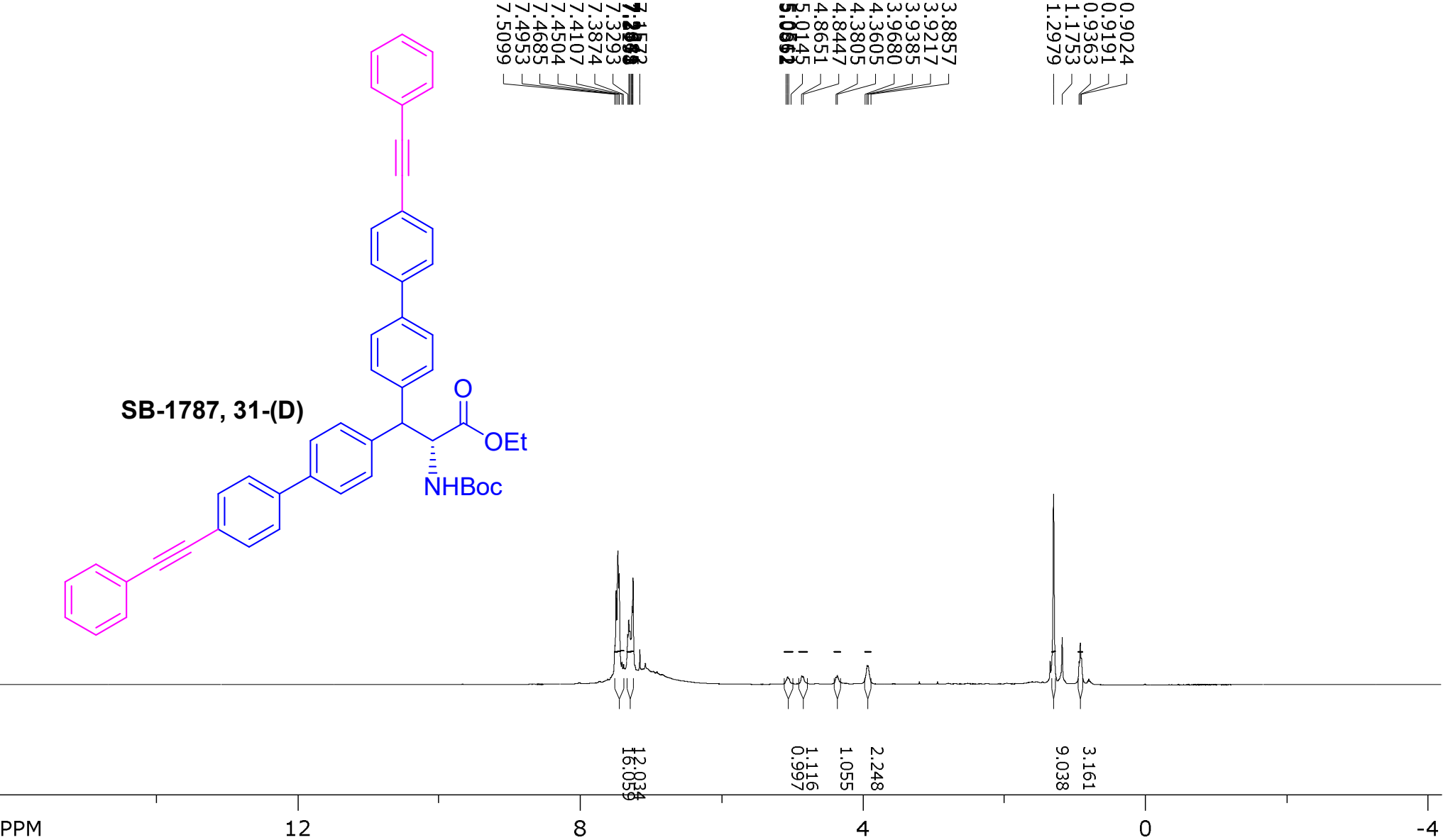


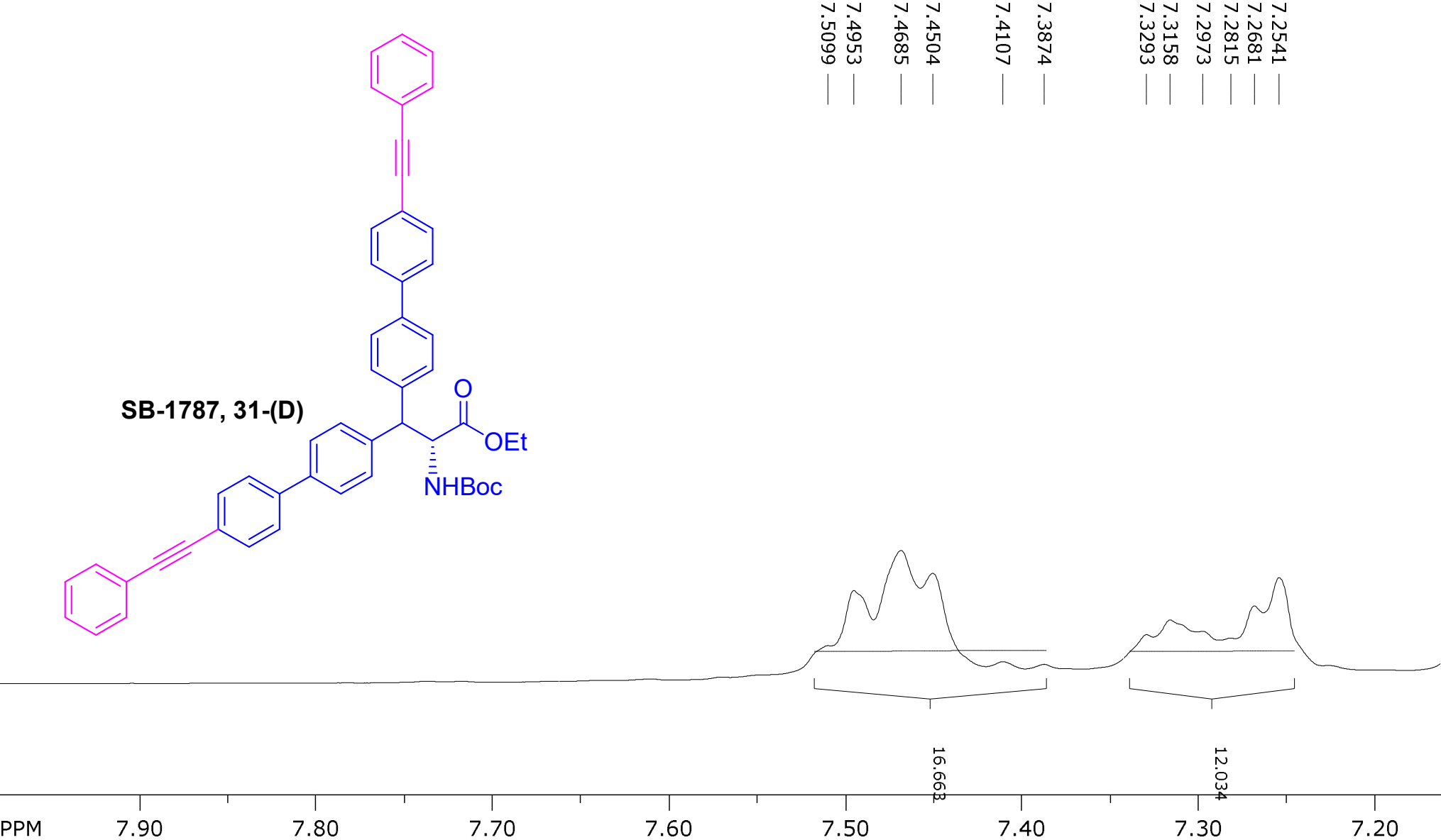


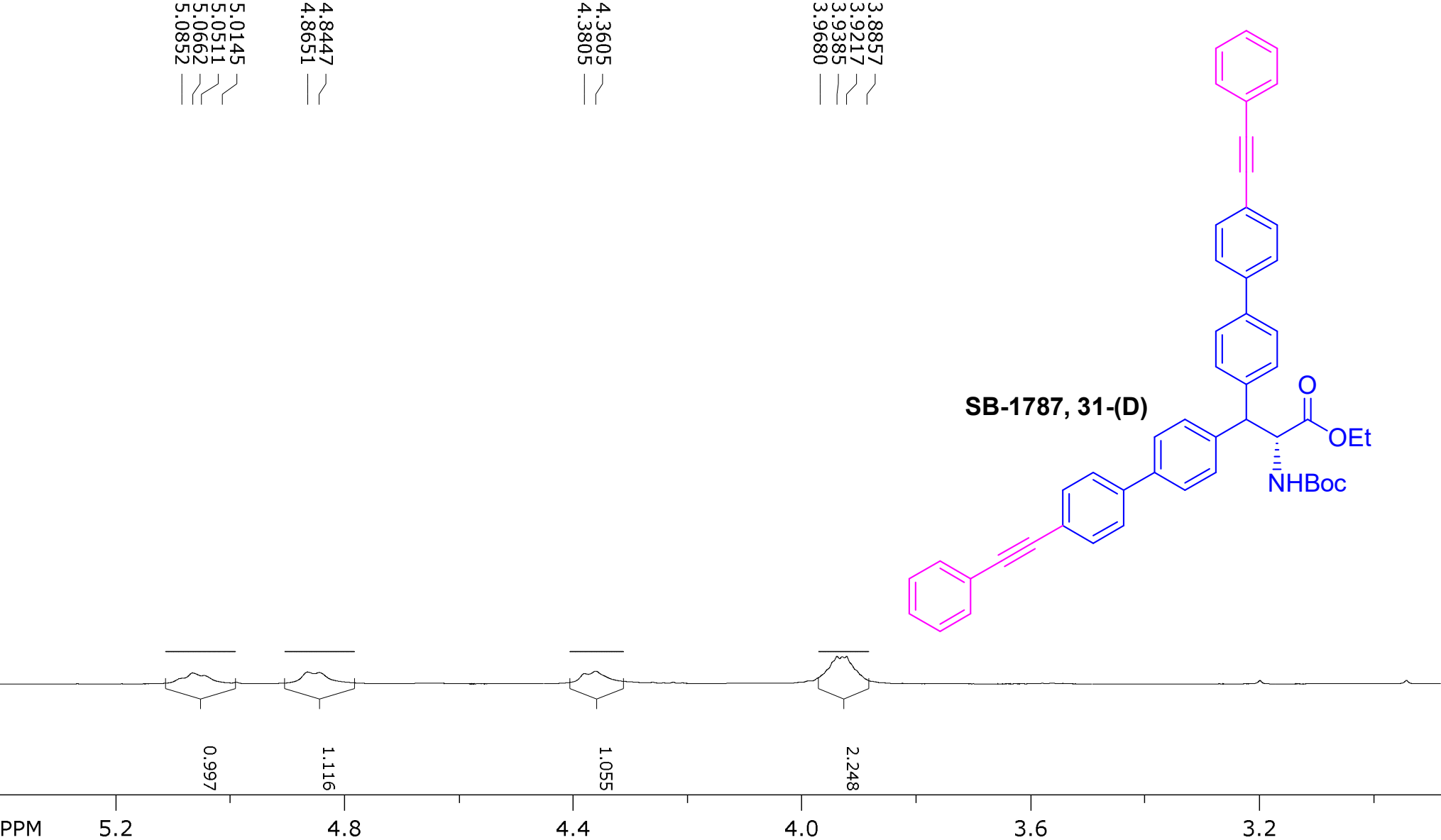


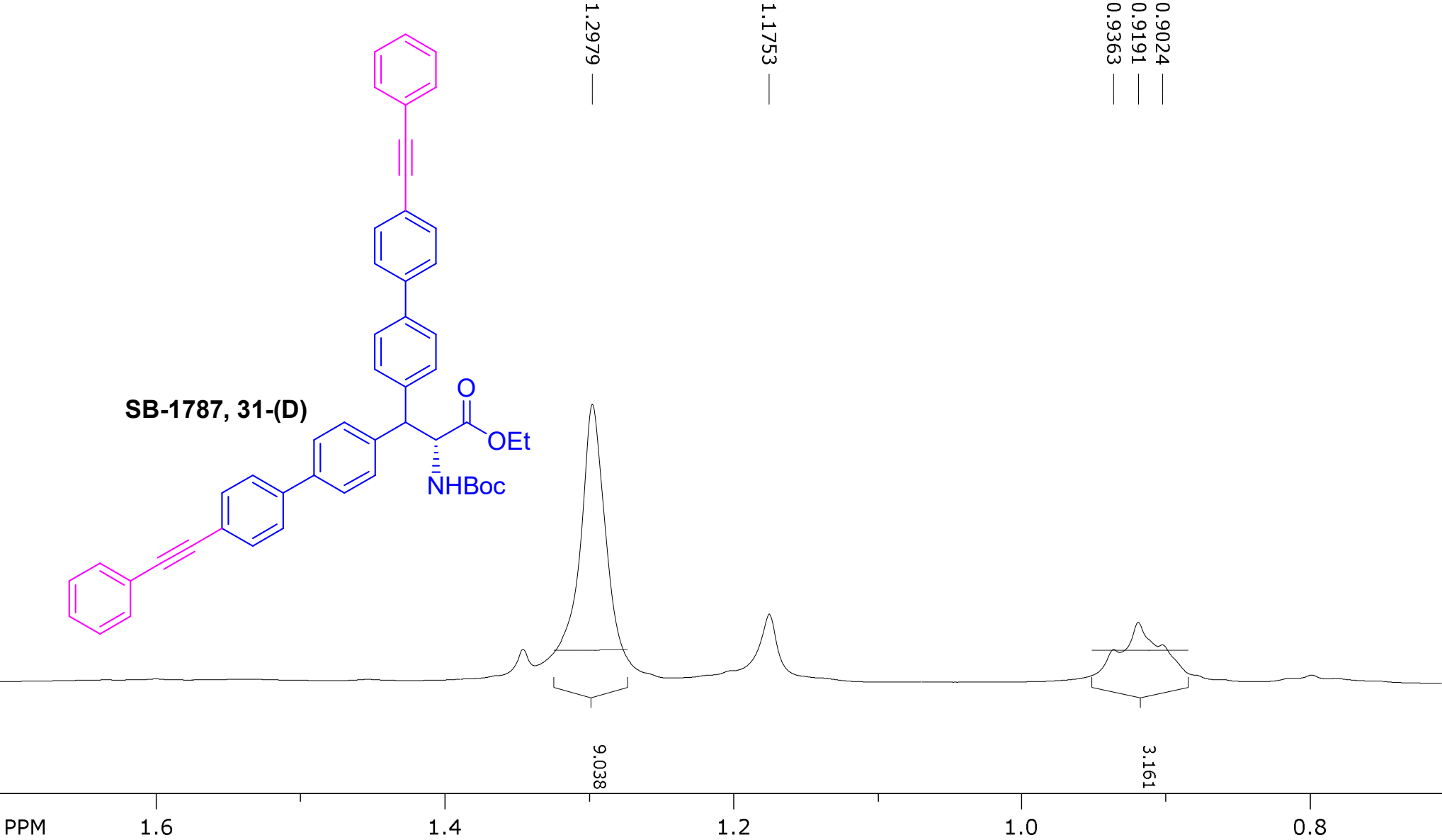


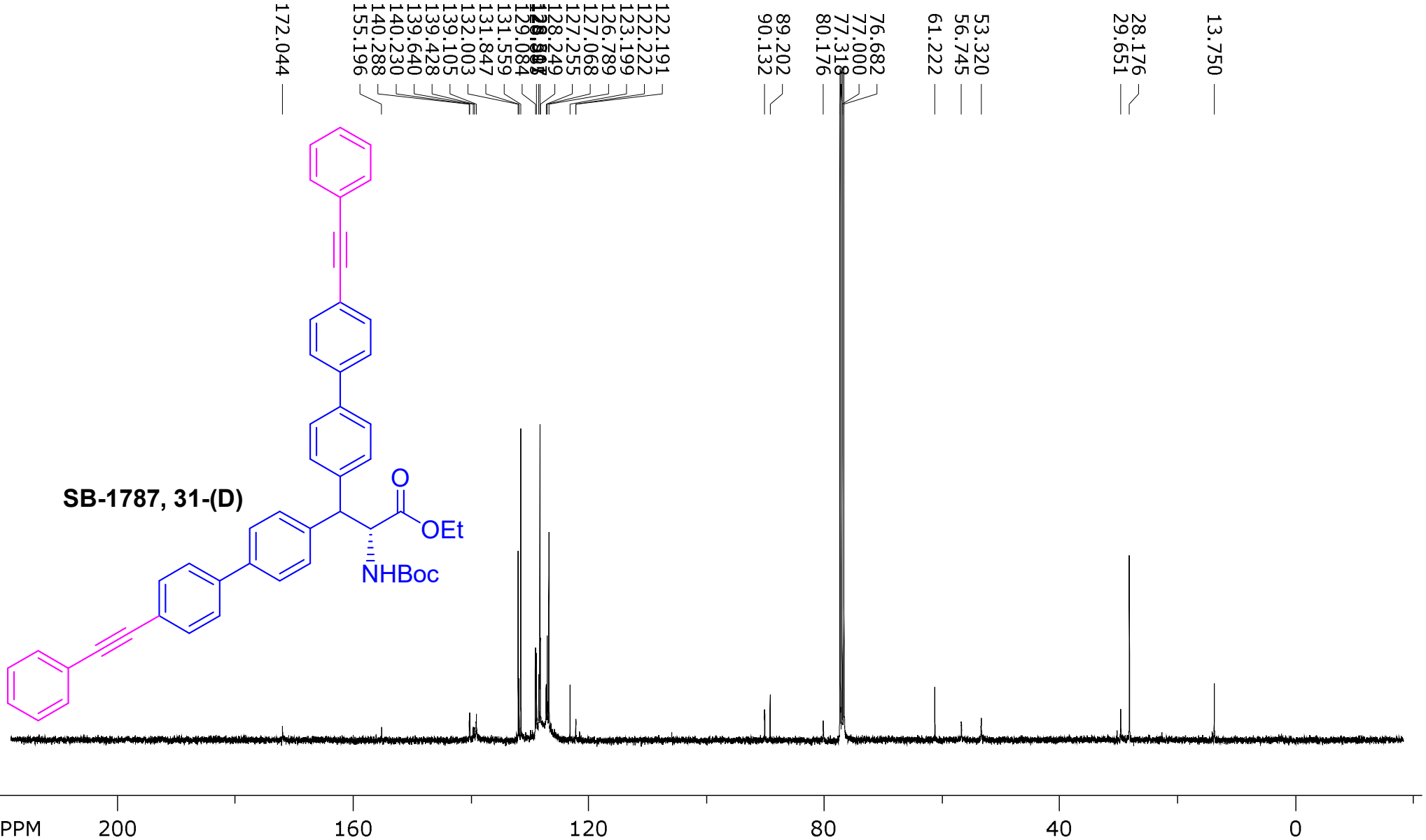


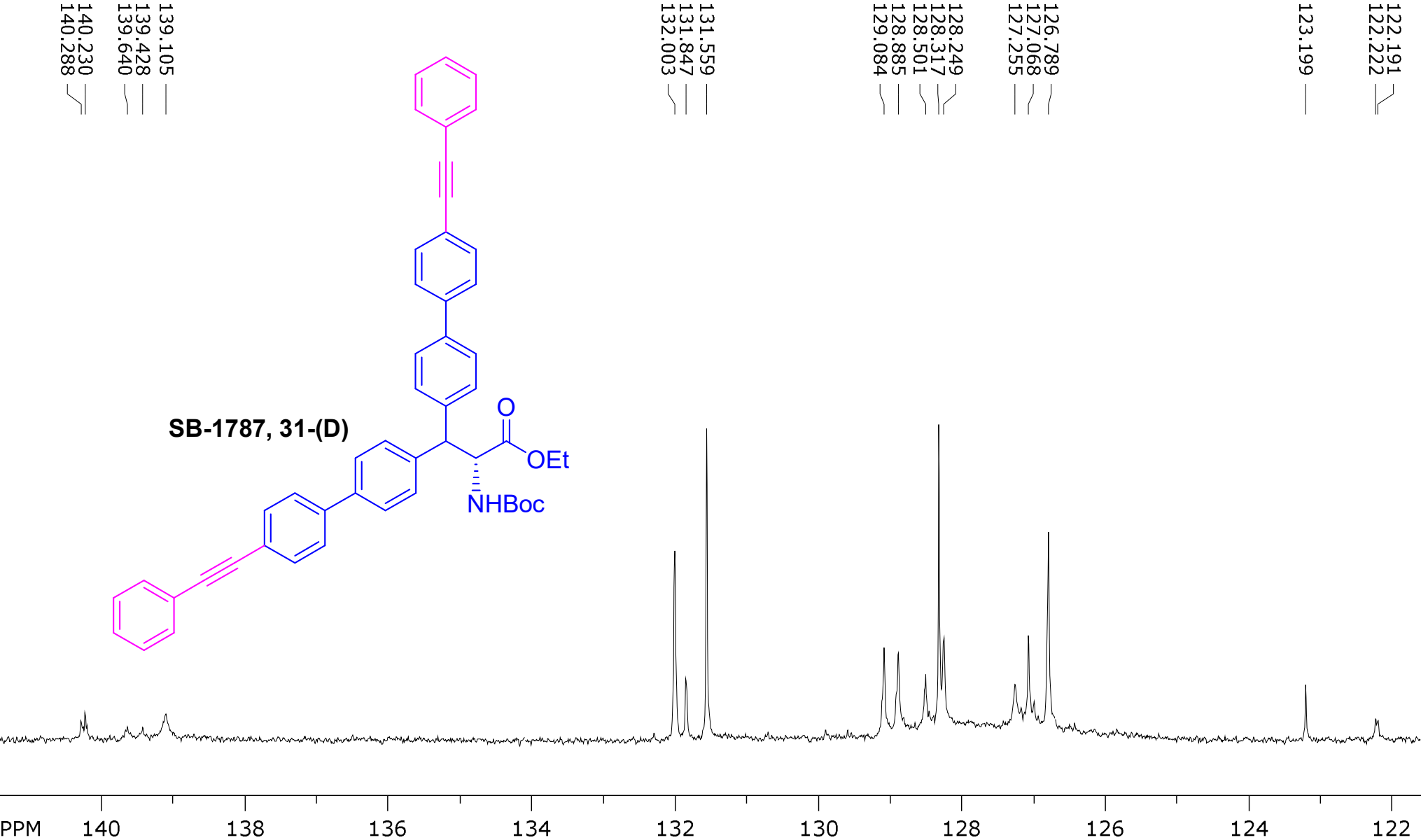


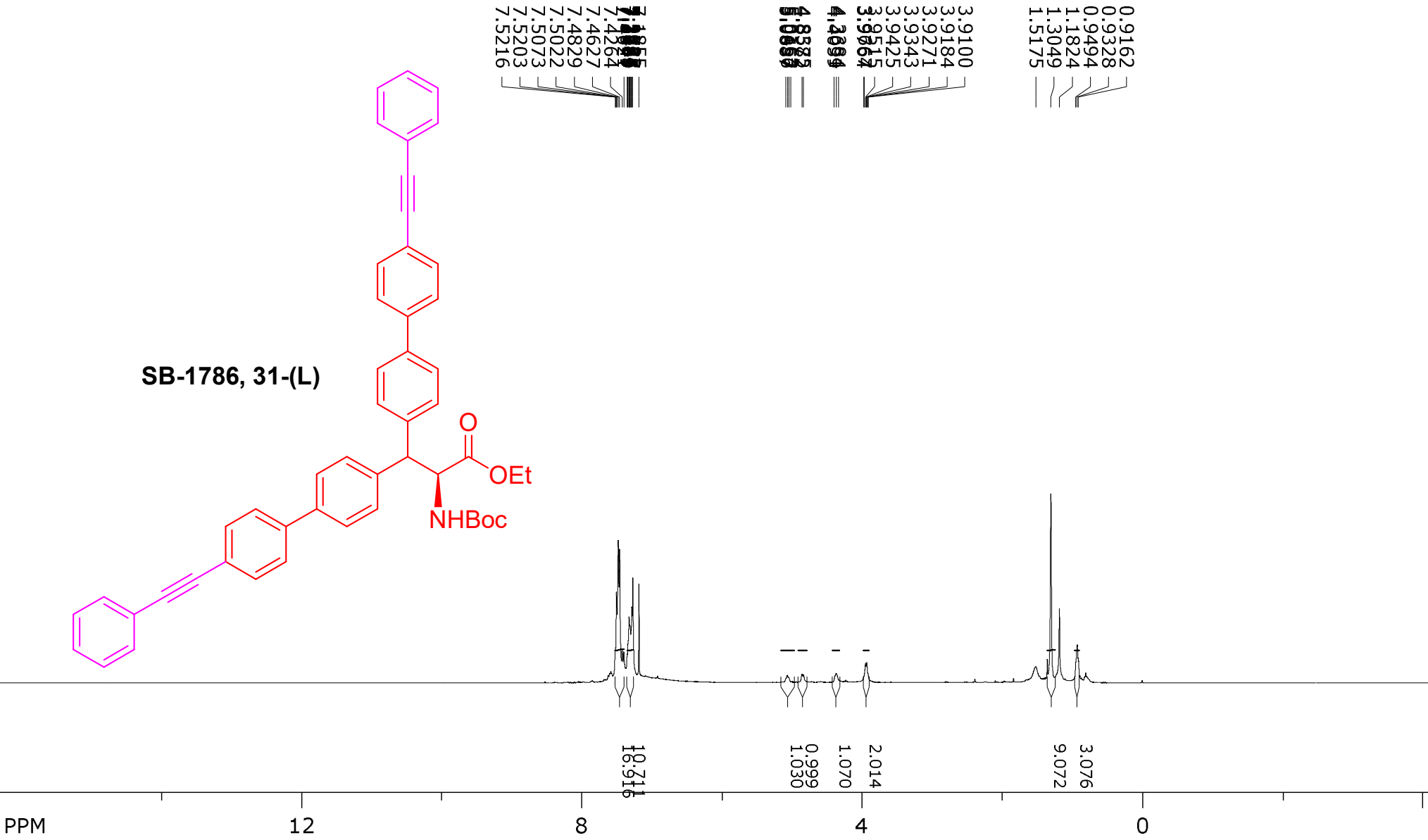


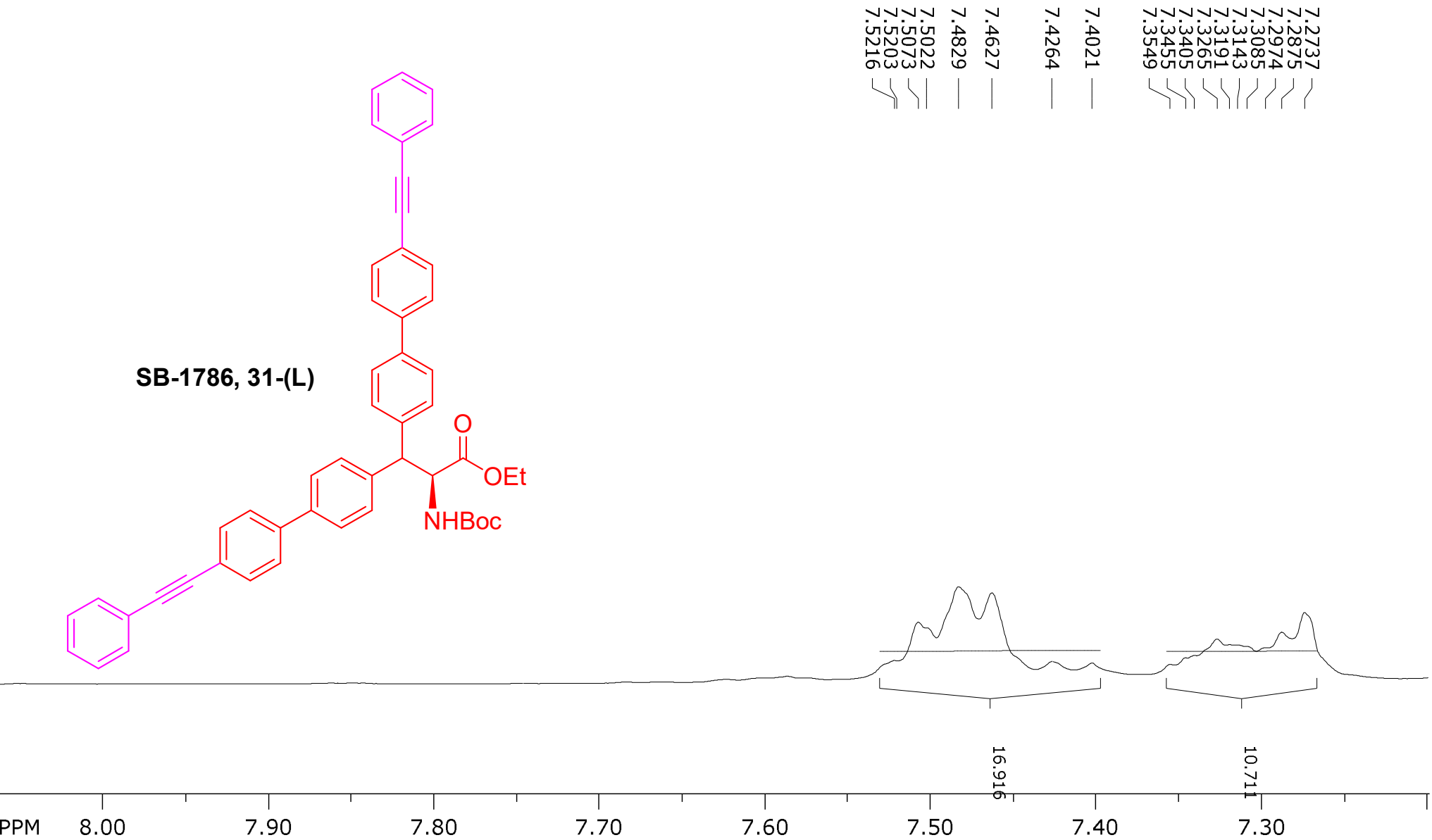


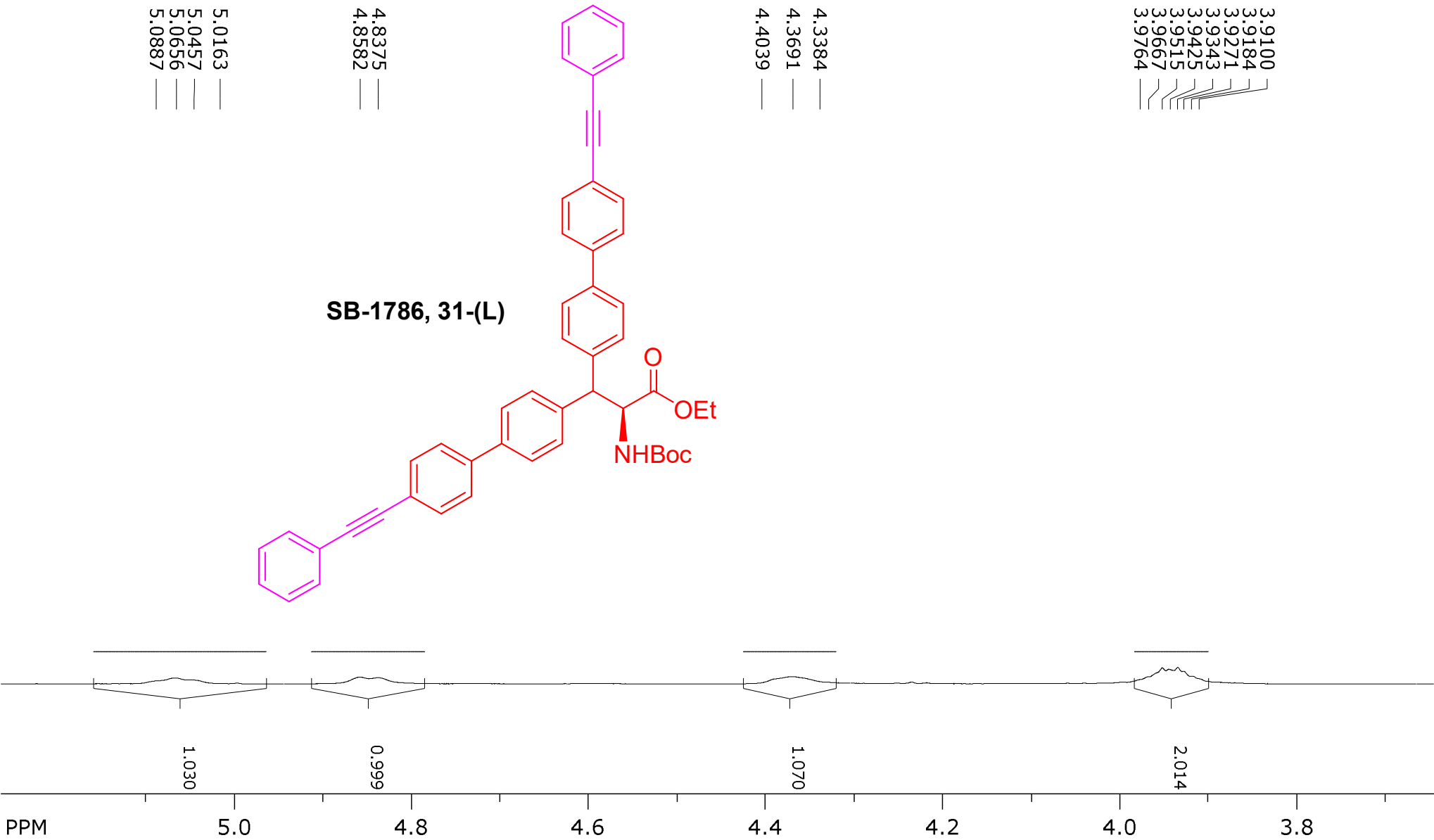


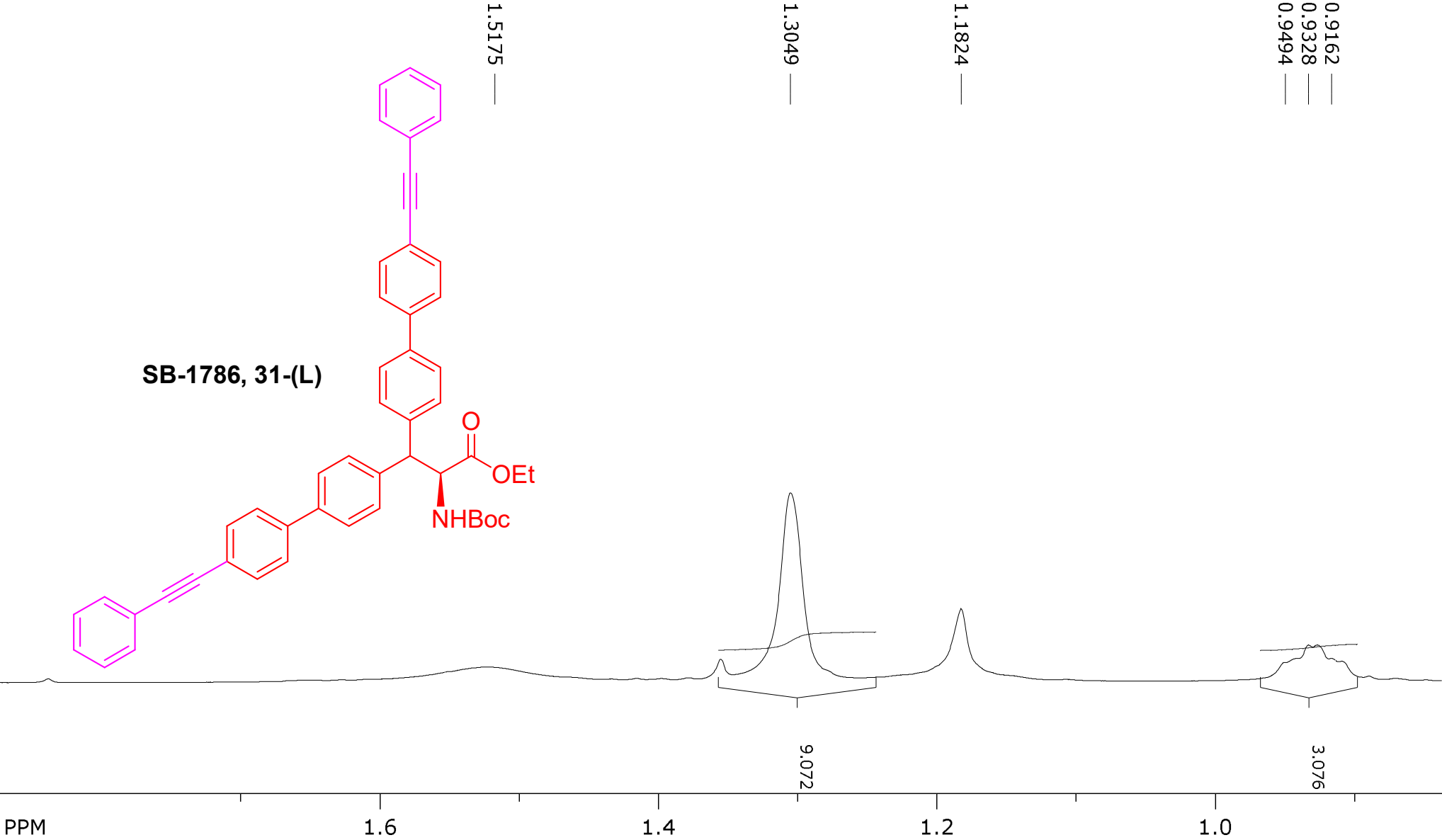


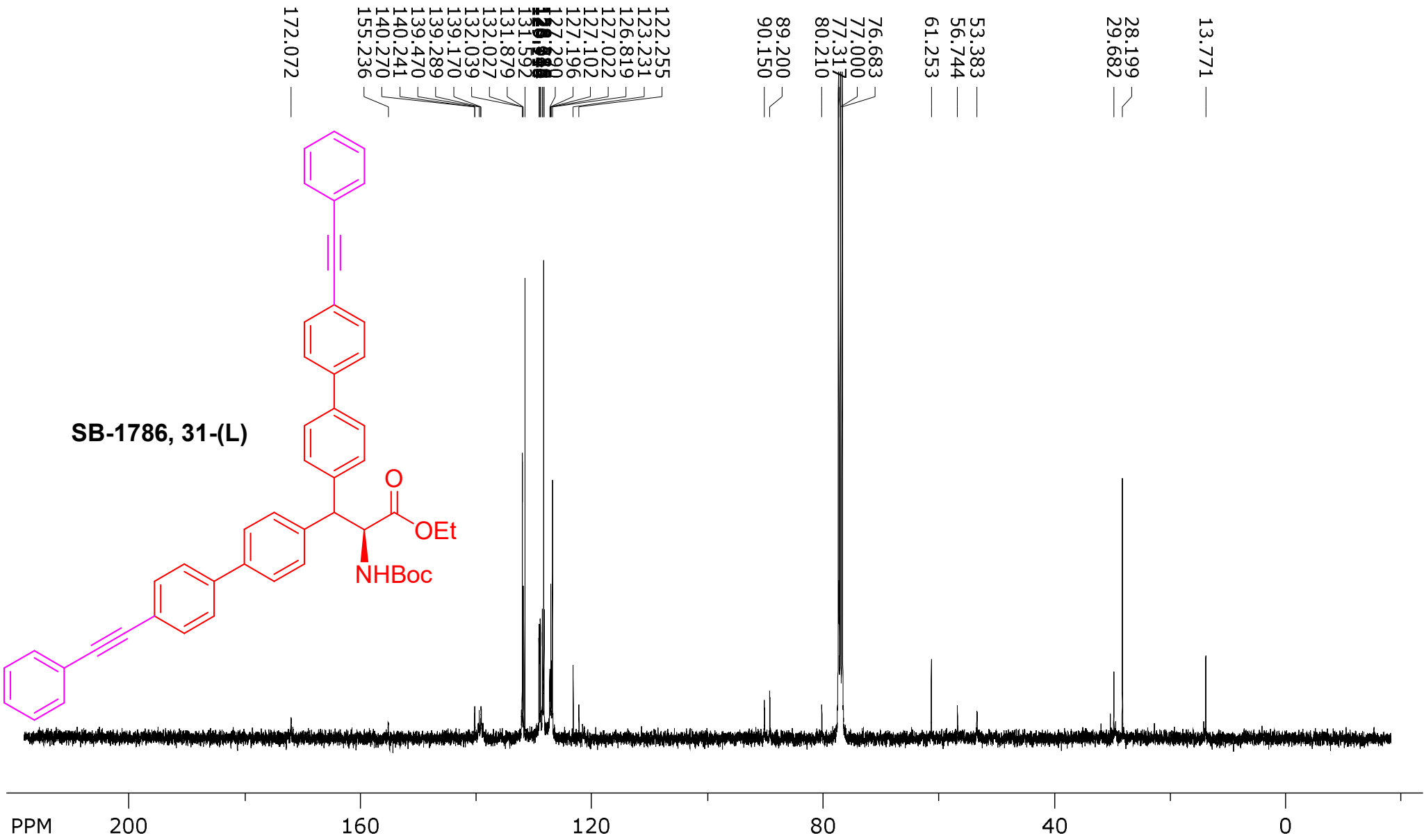












139.170
139.289
139.470
140.241
140.270

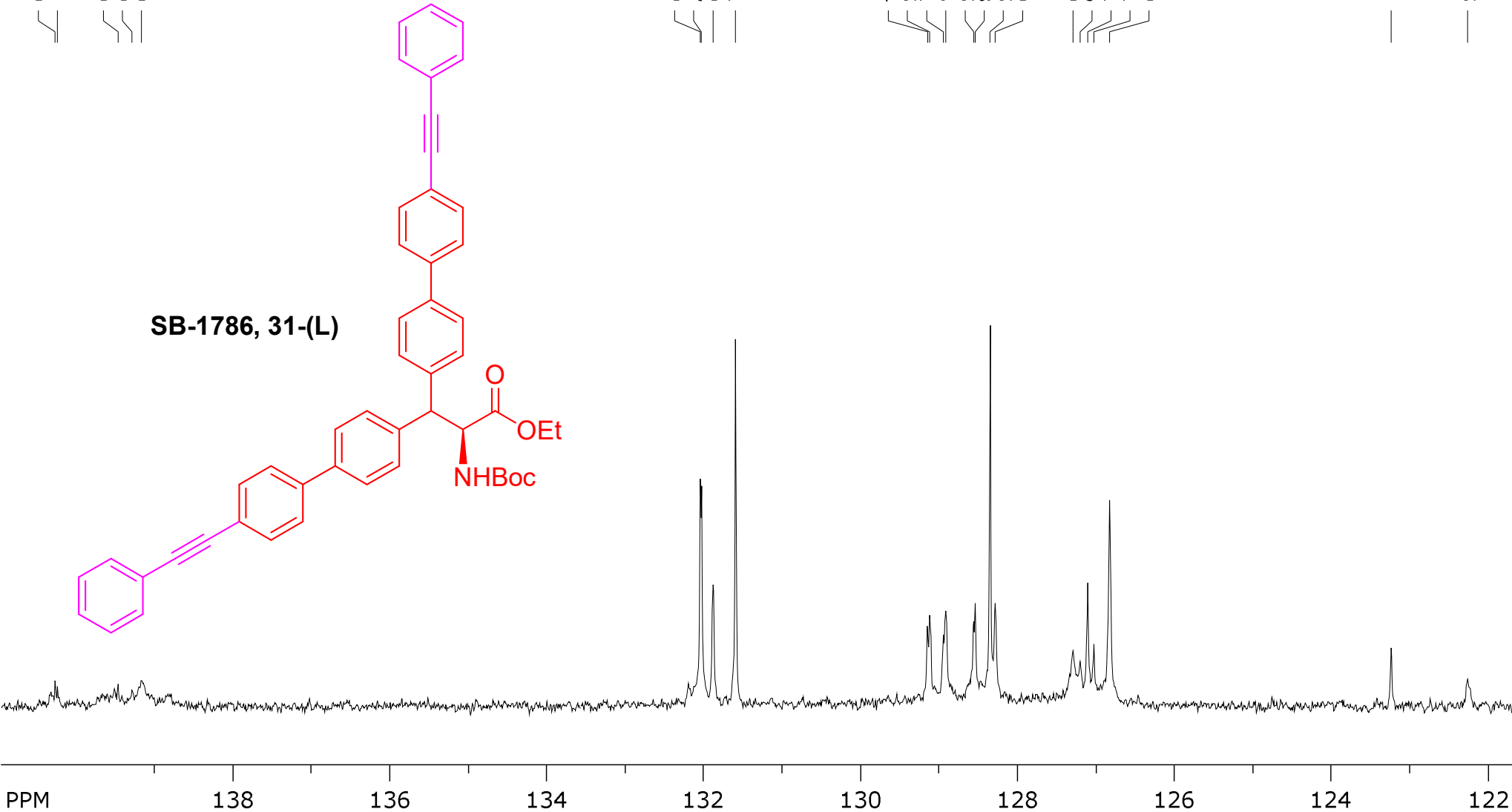
131.592
131.879
132.027
132.039

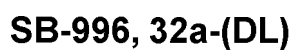
128.280
128.345
128.538
128.555
128.913
128.942
129.115
129.144

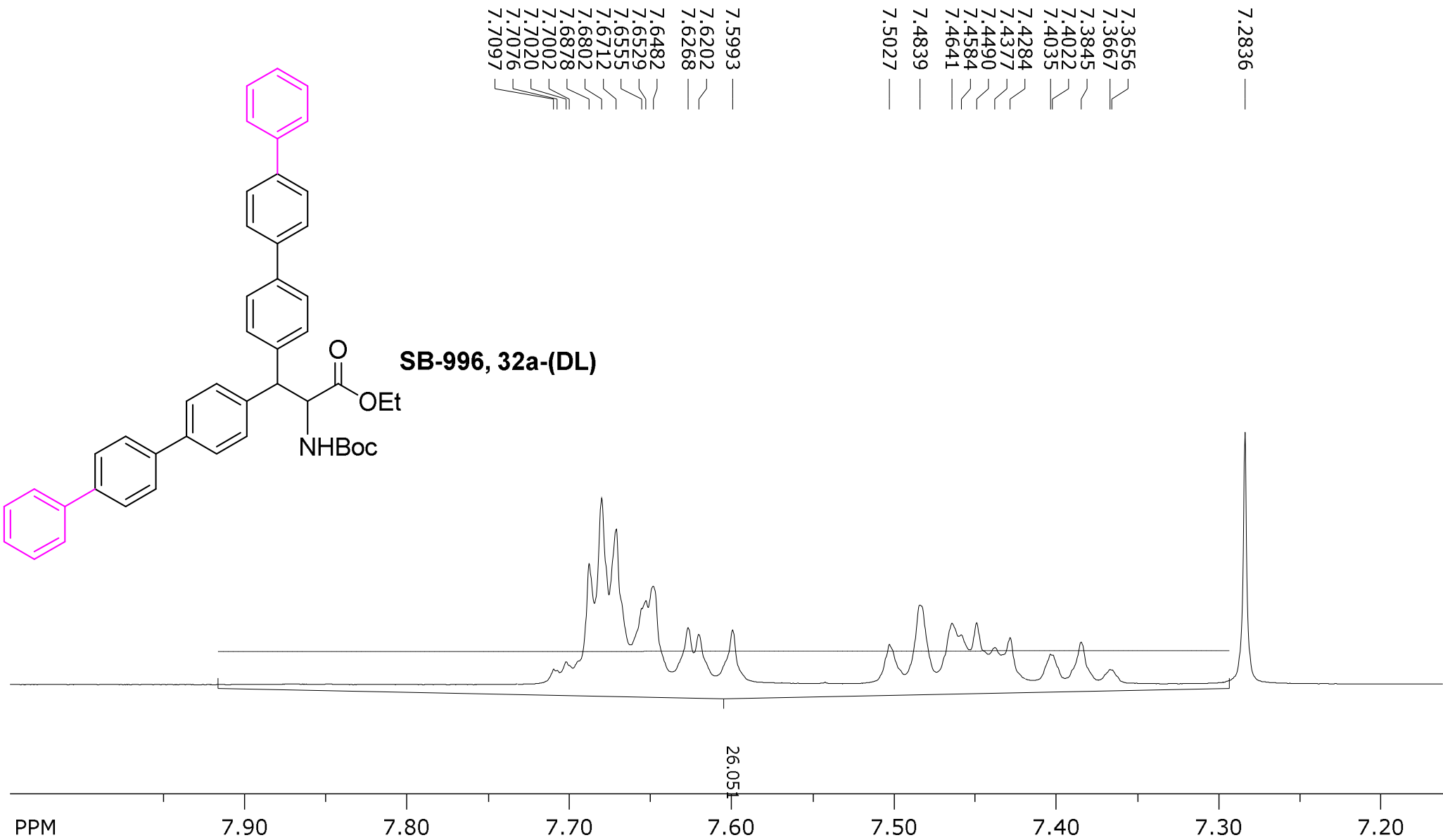
126.819
127.022
127.102
127.196
127.290

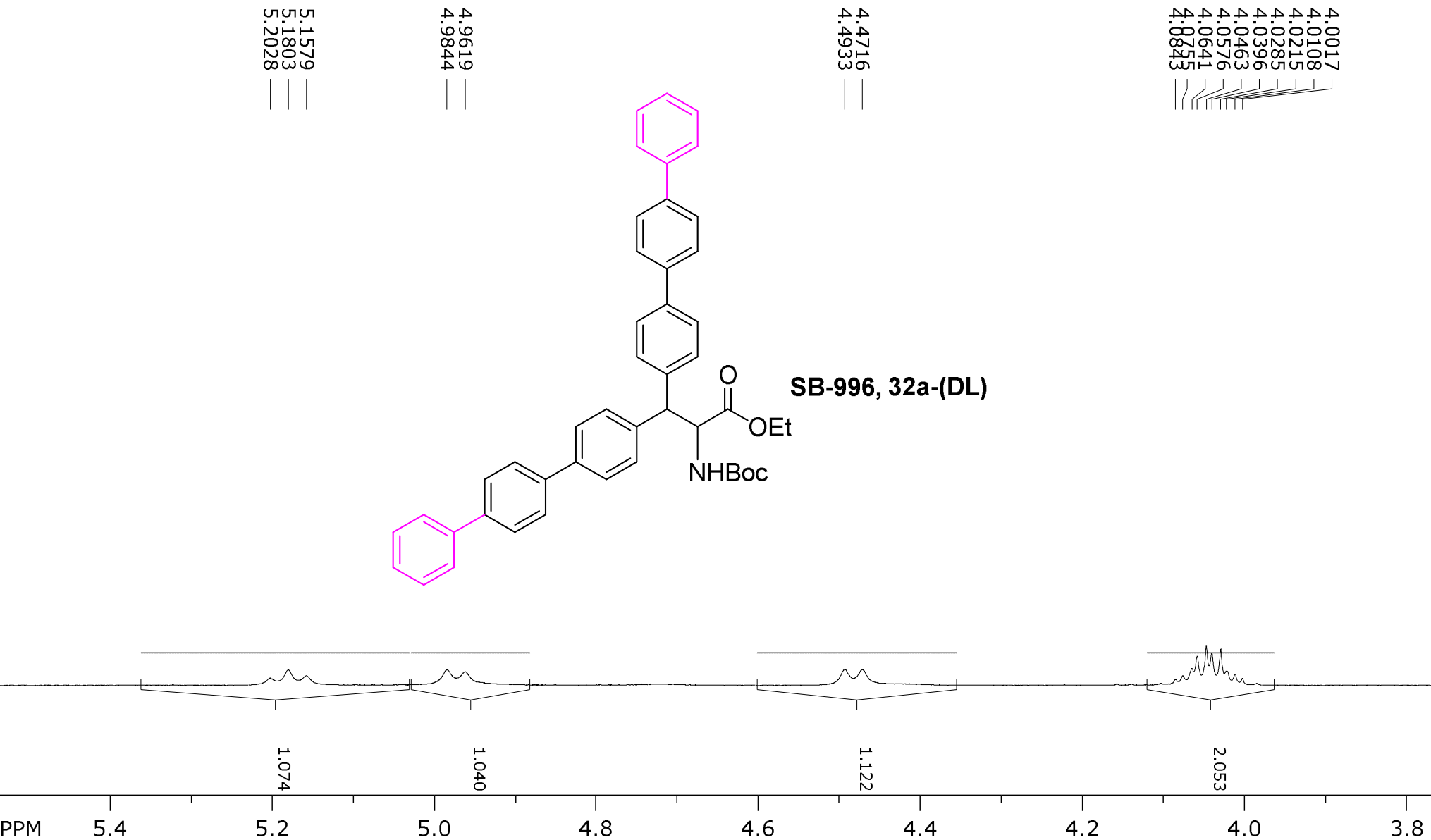
123.231

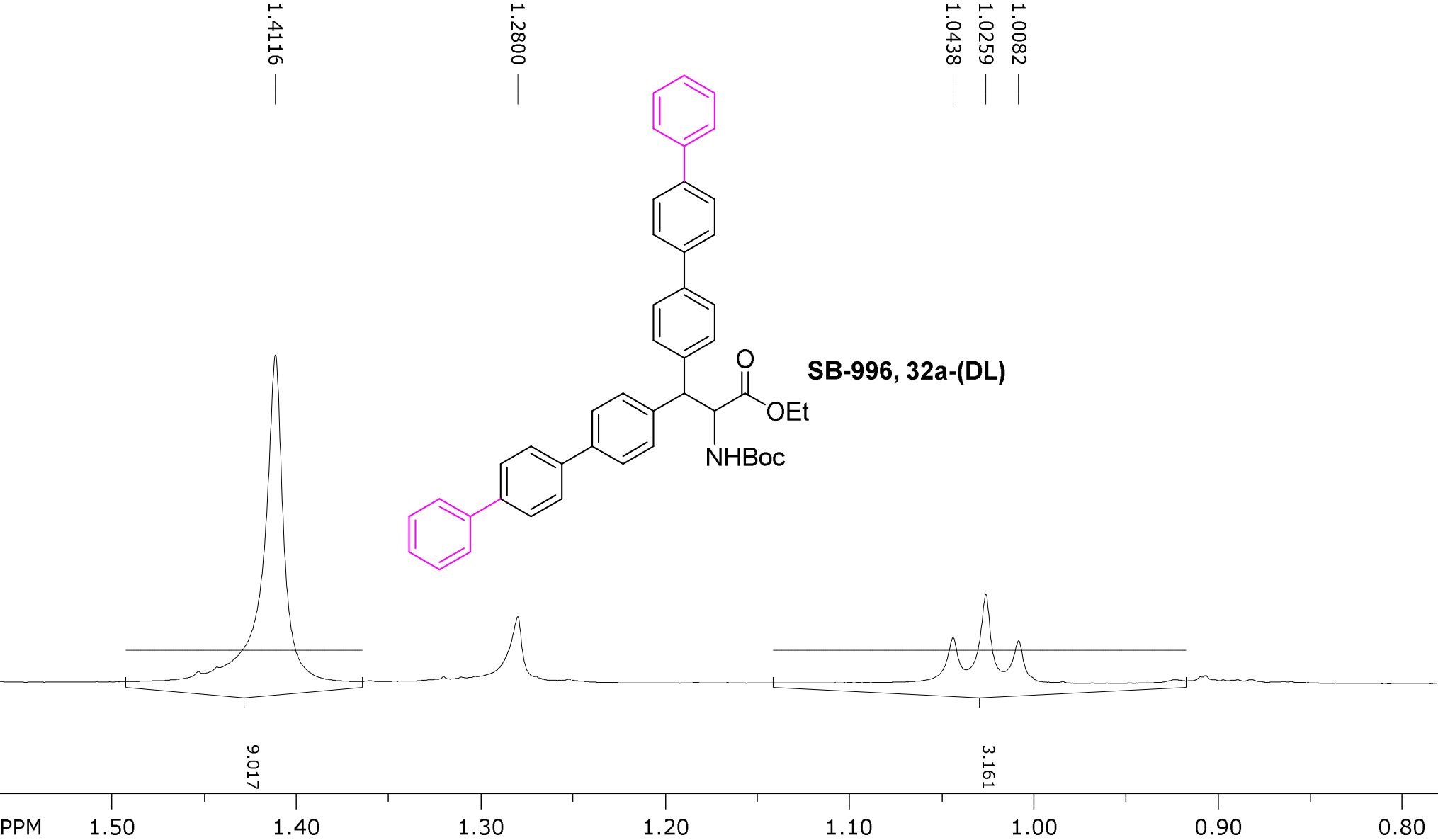
122.255

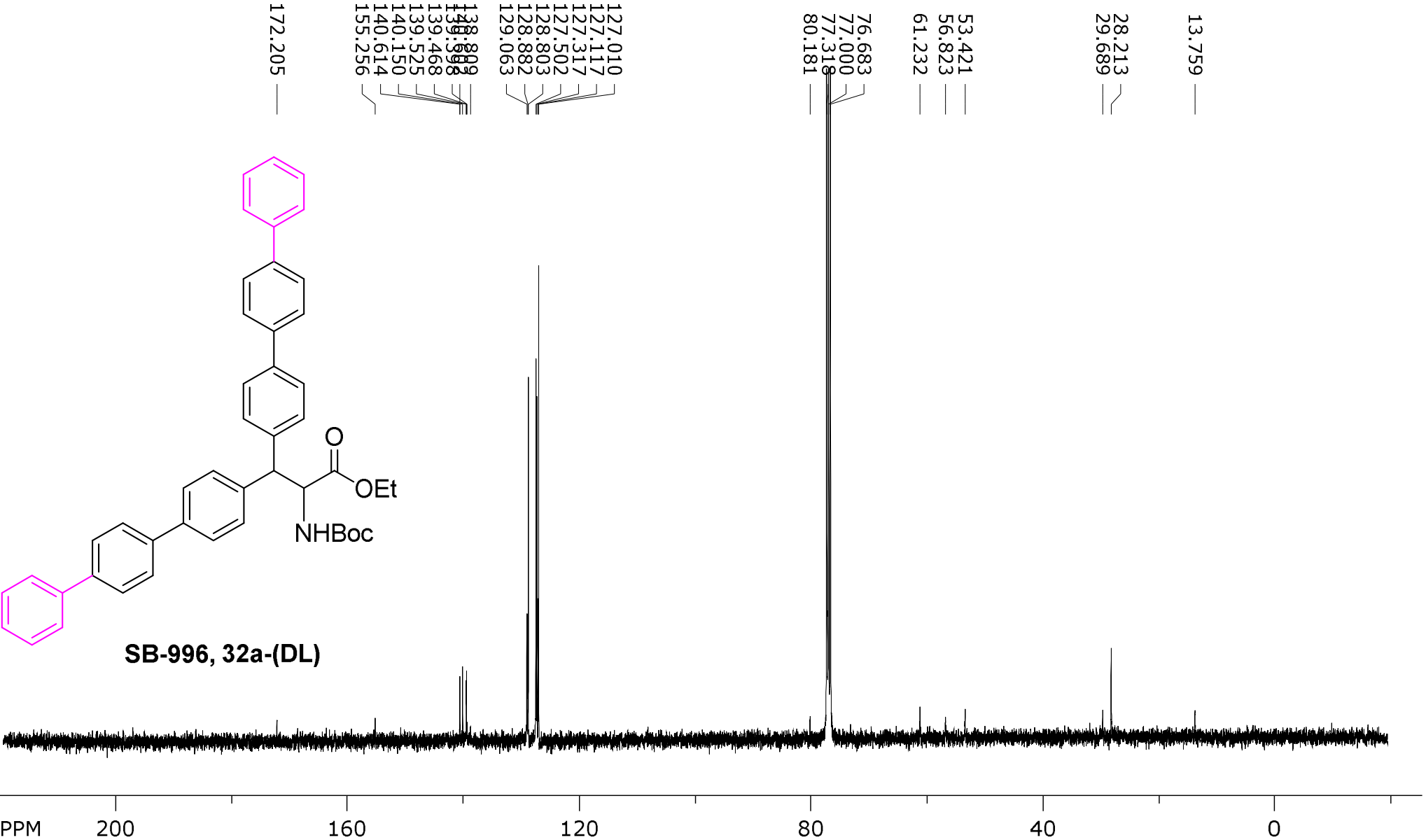


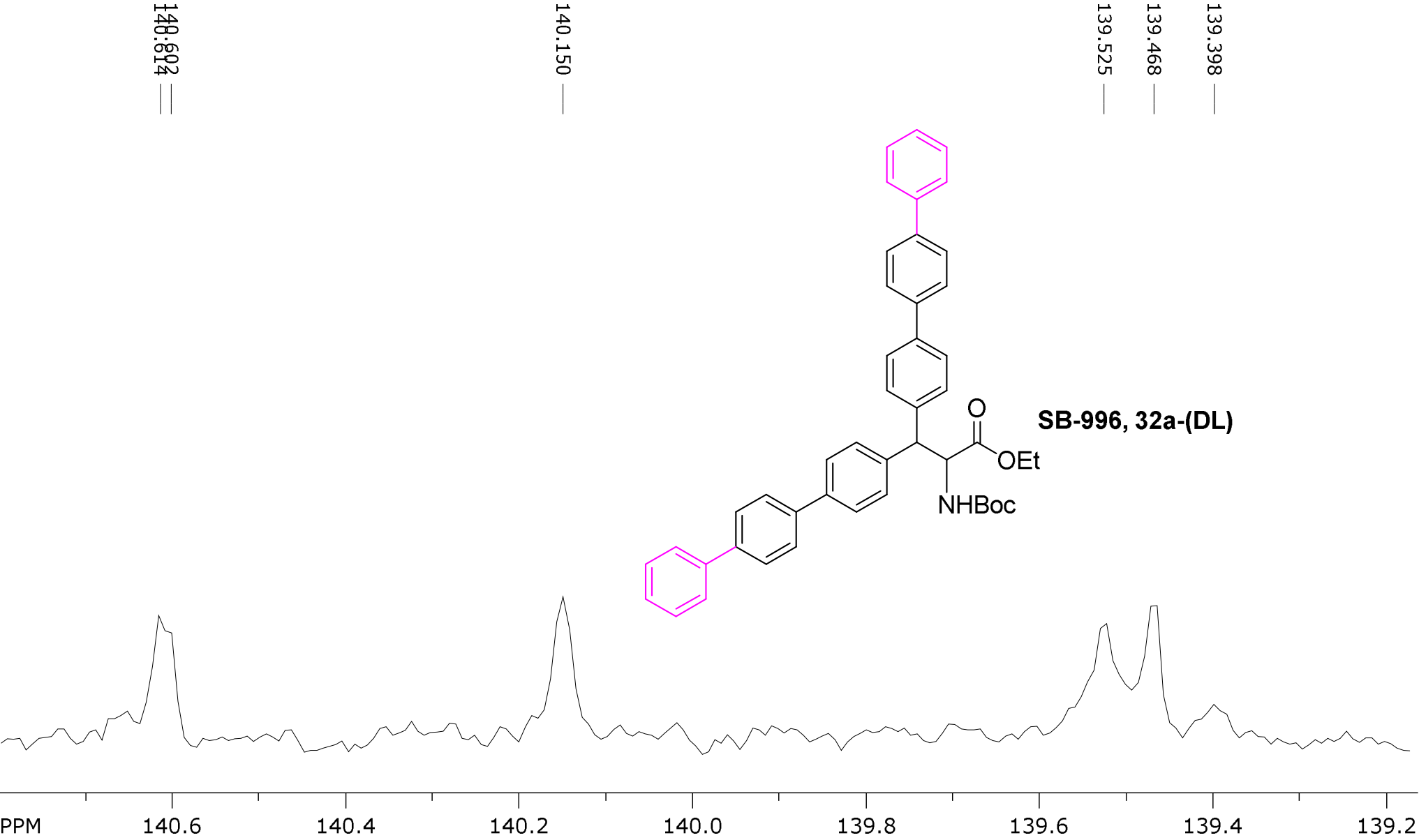


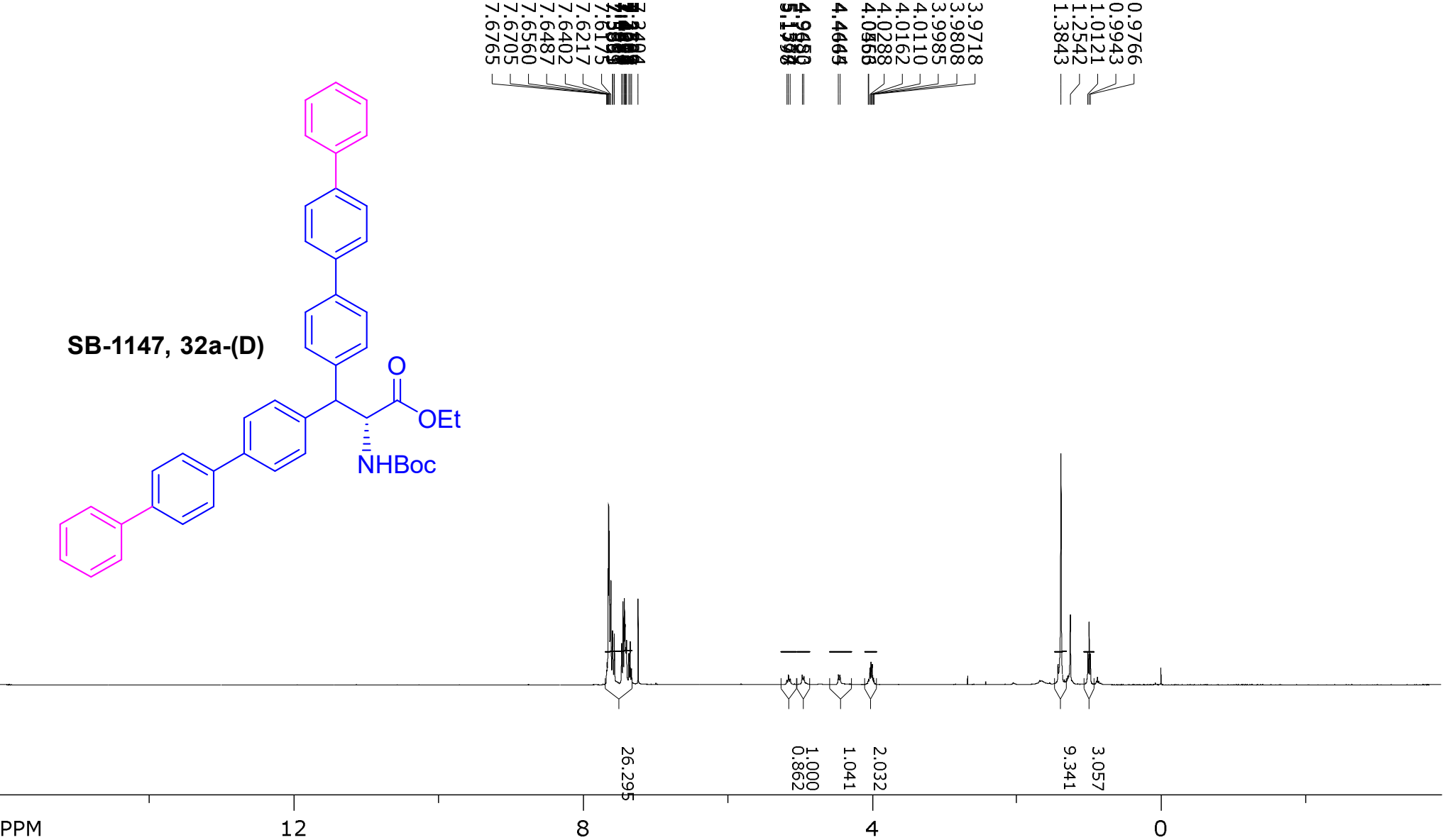


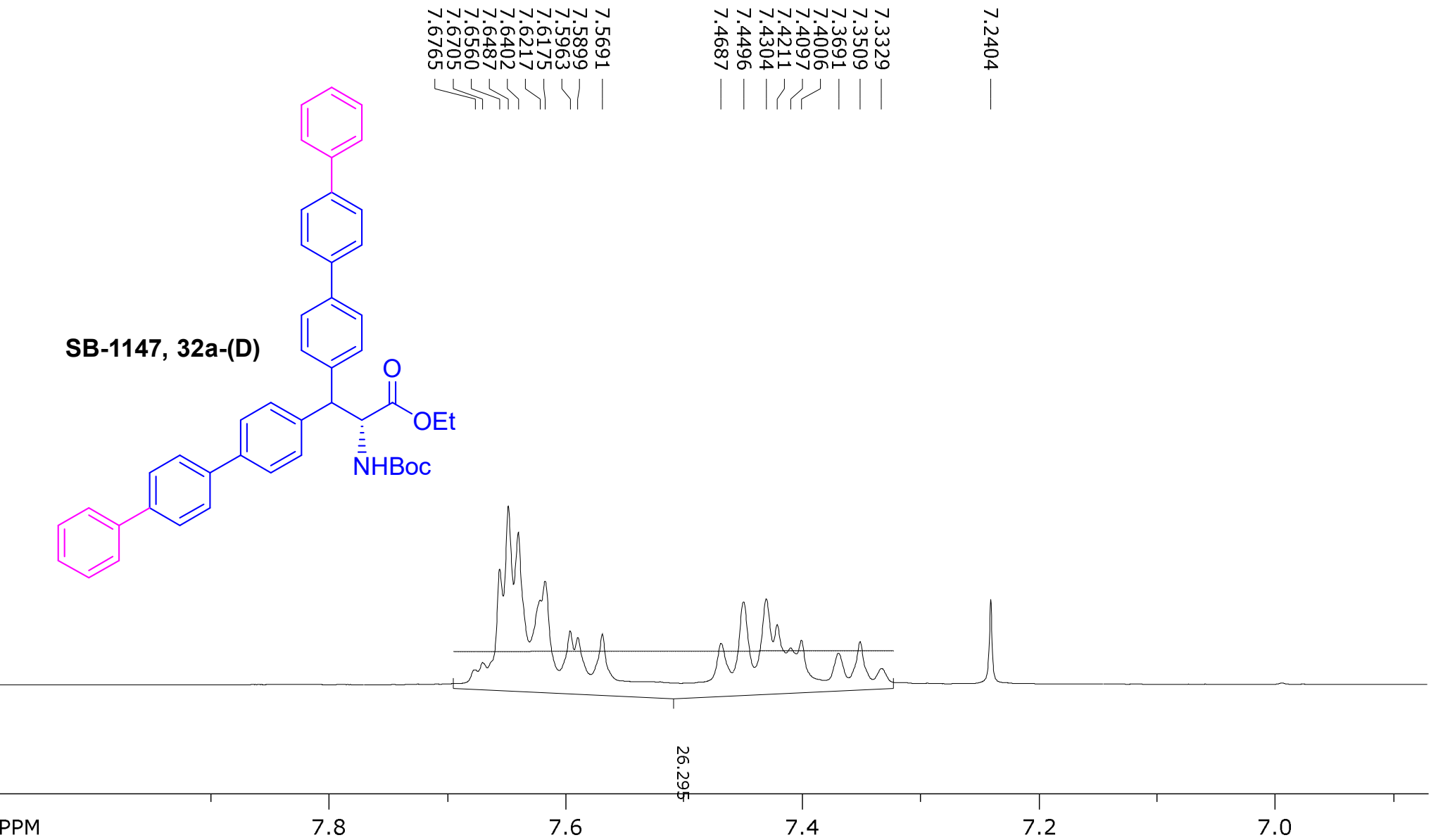


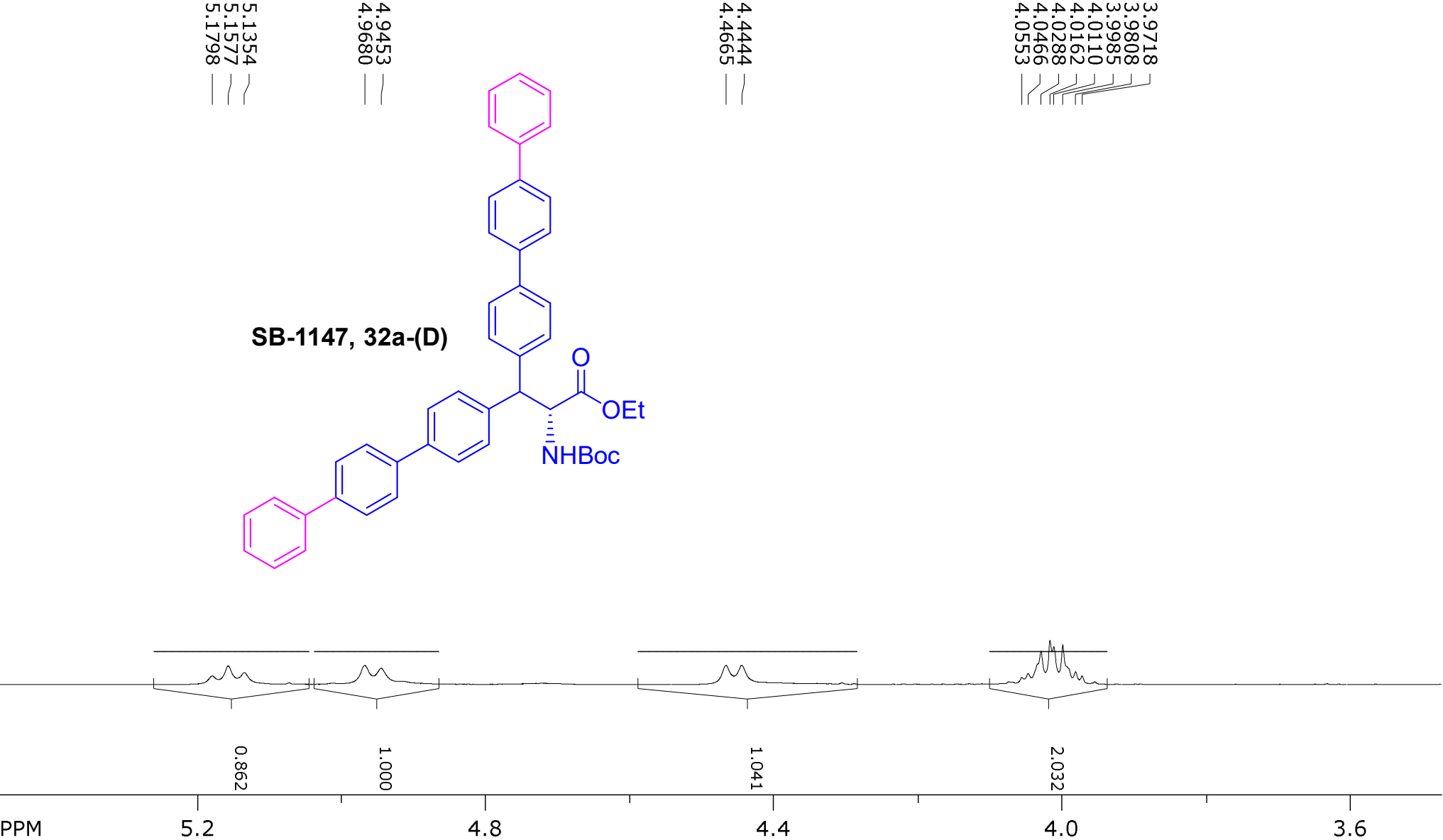


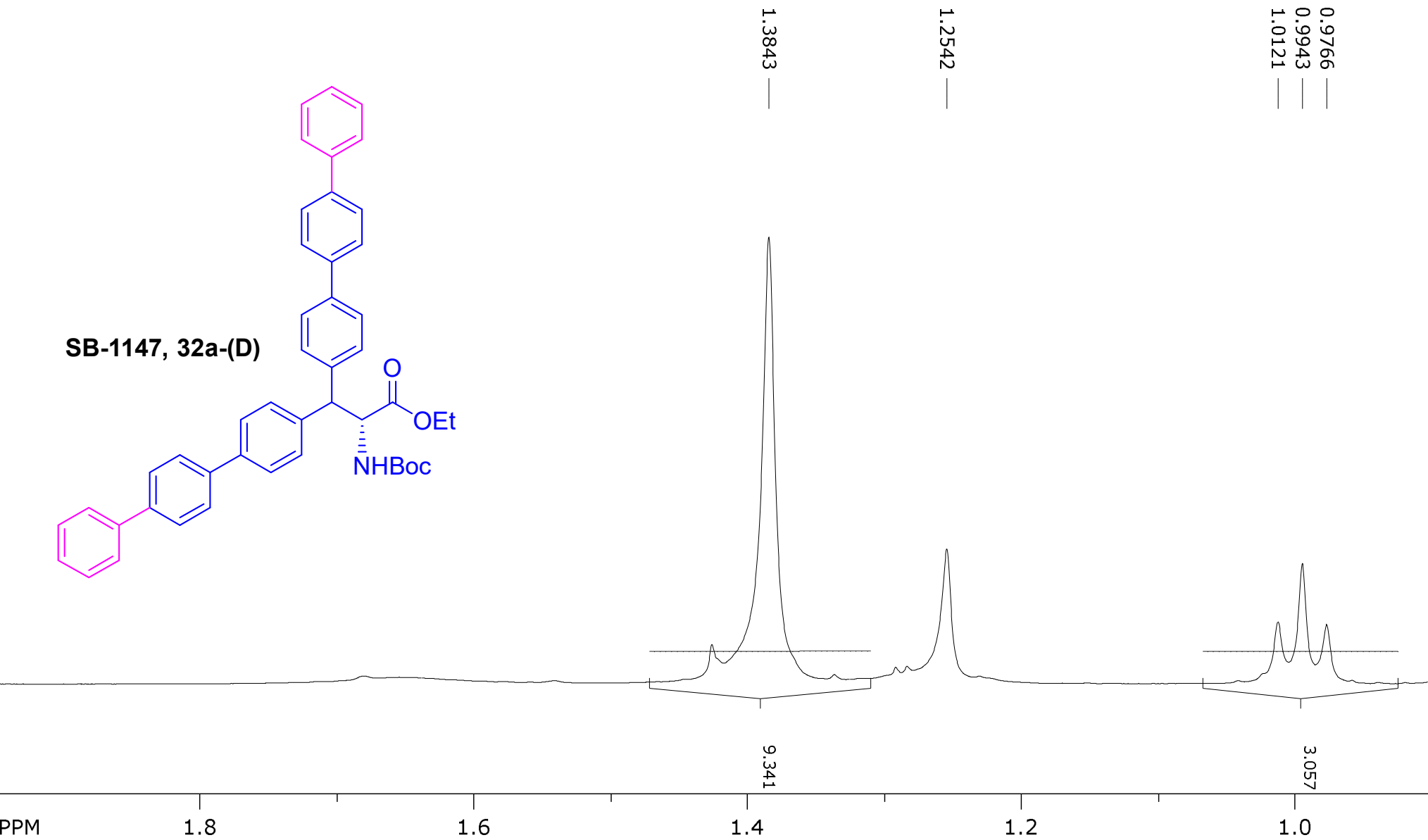


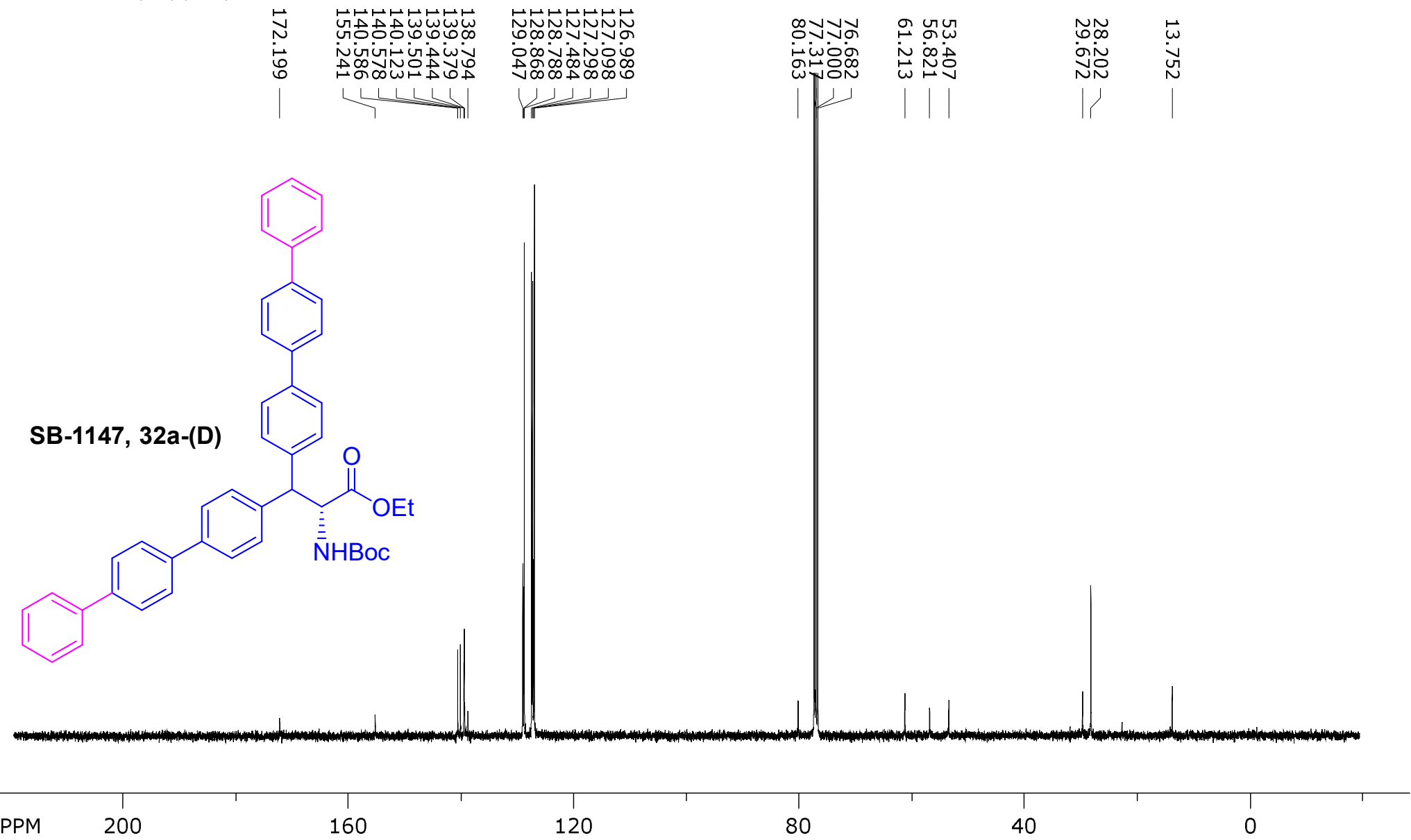


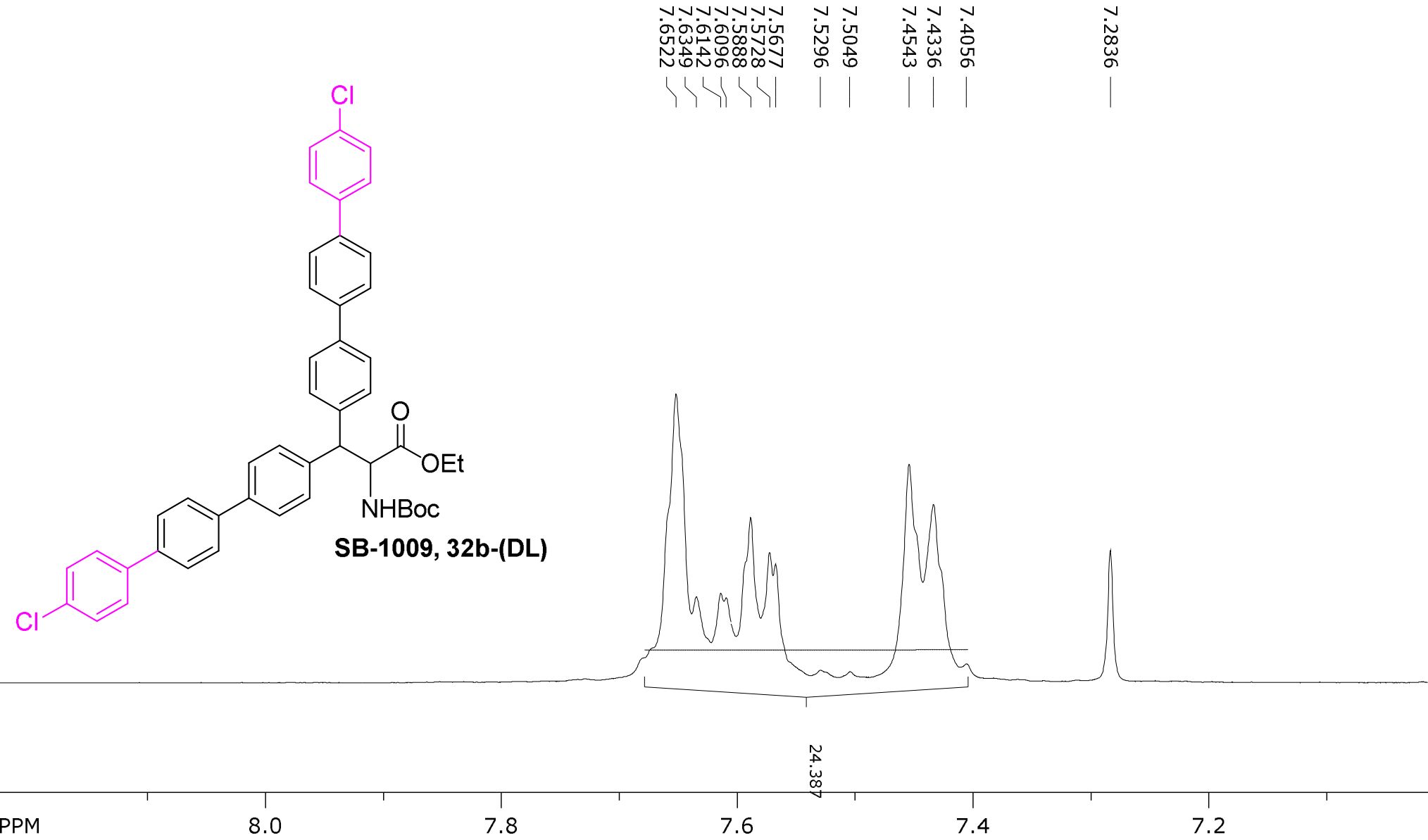


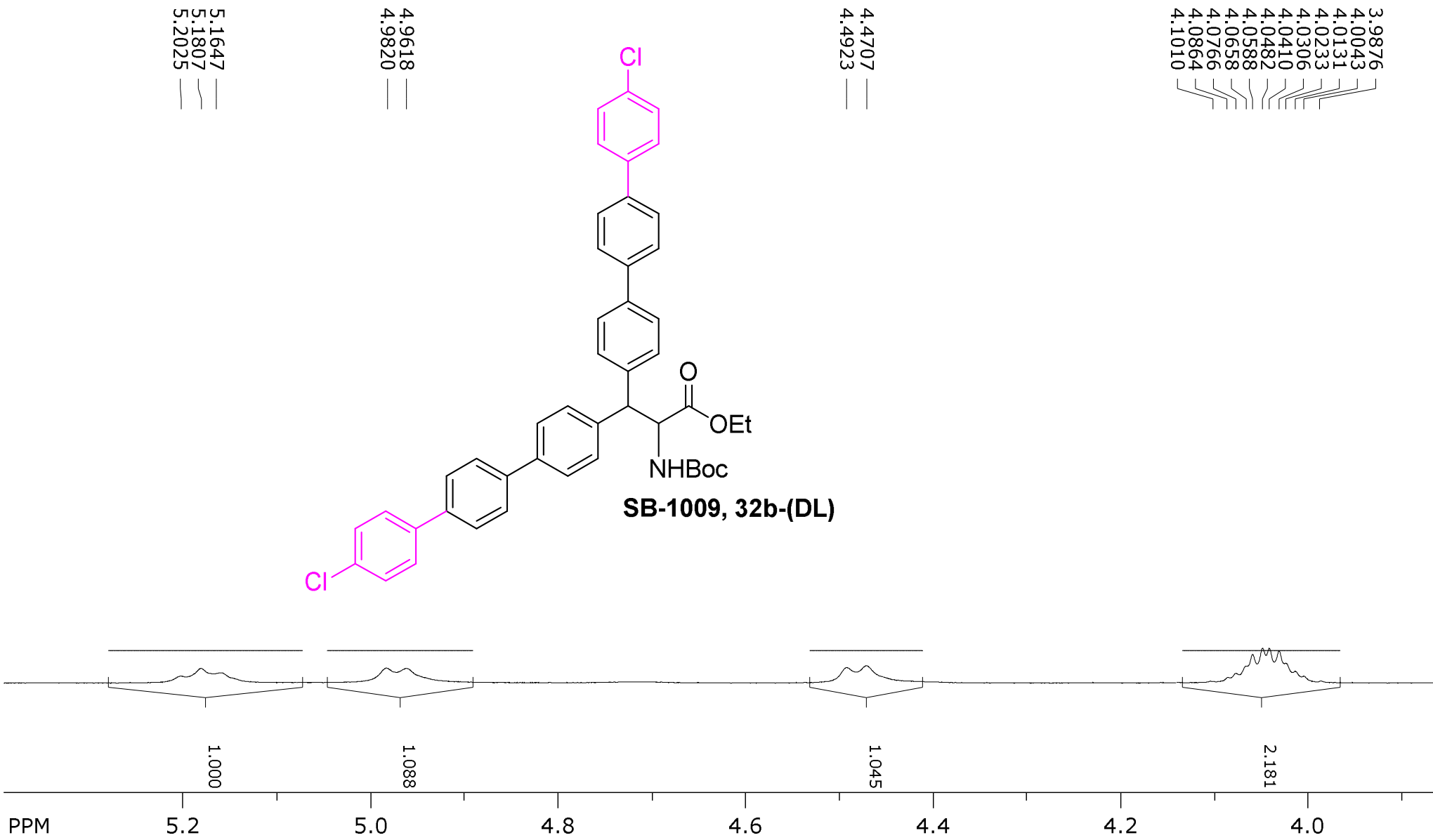


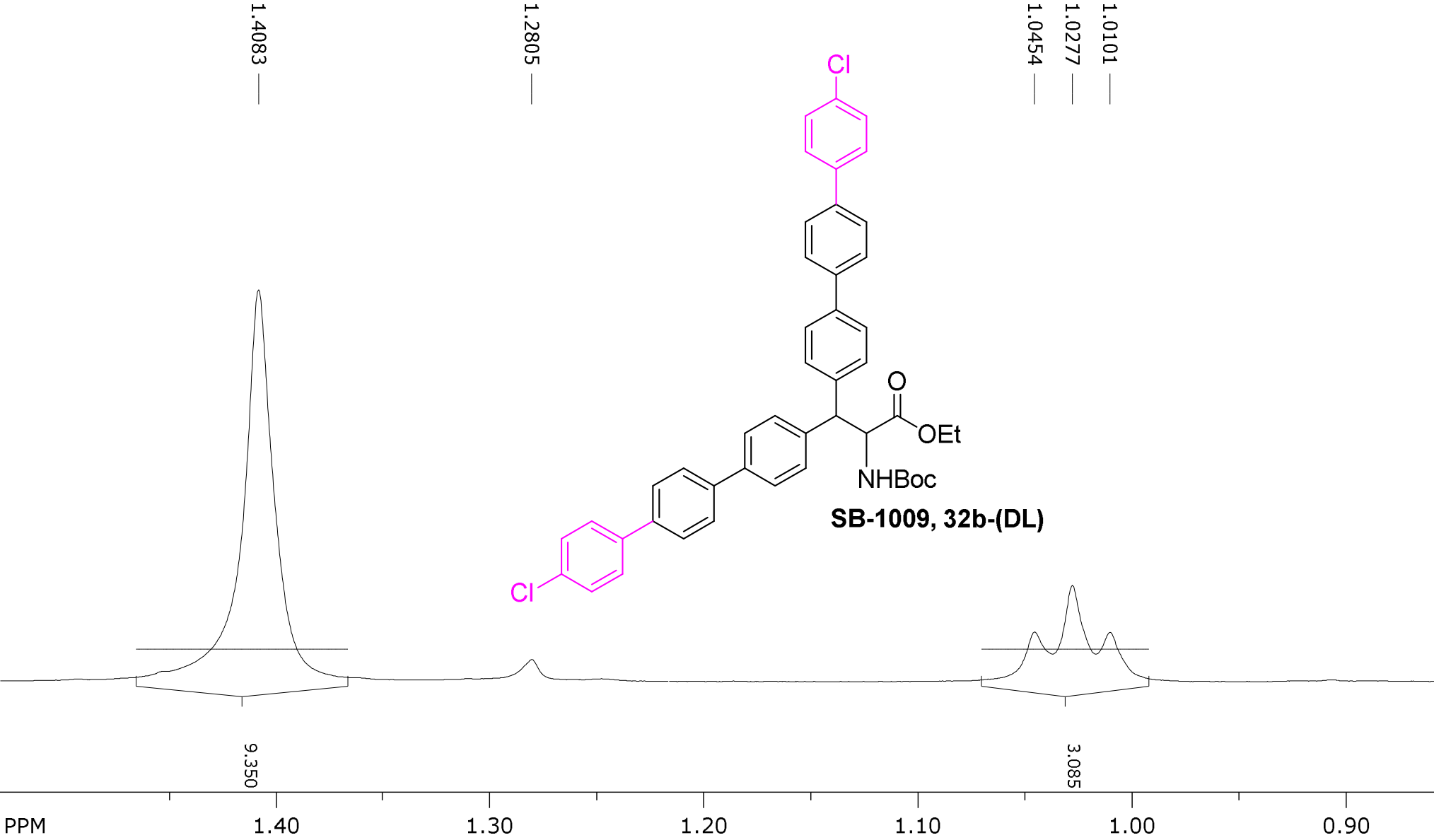


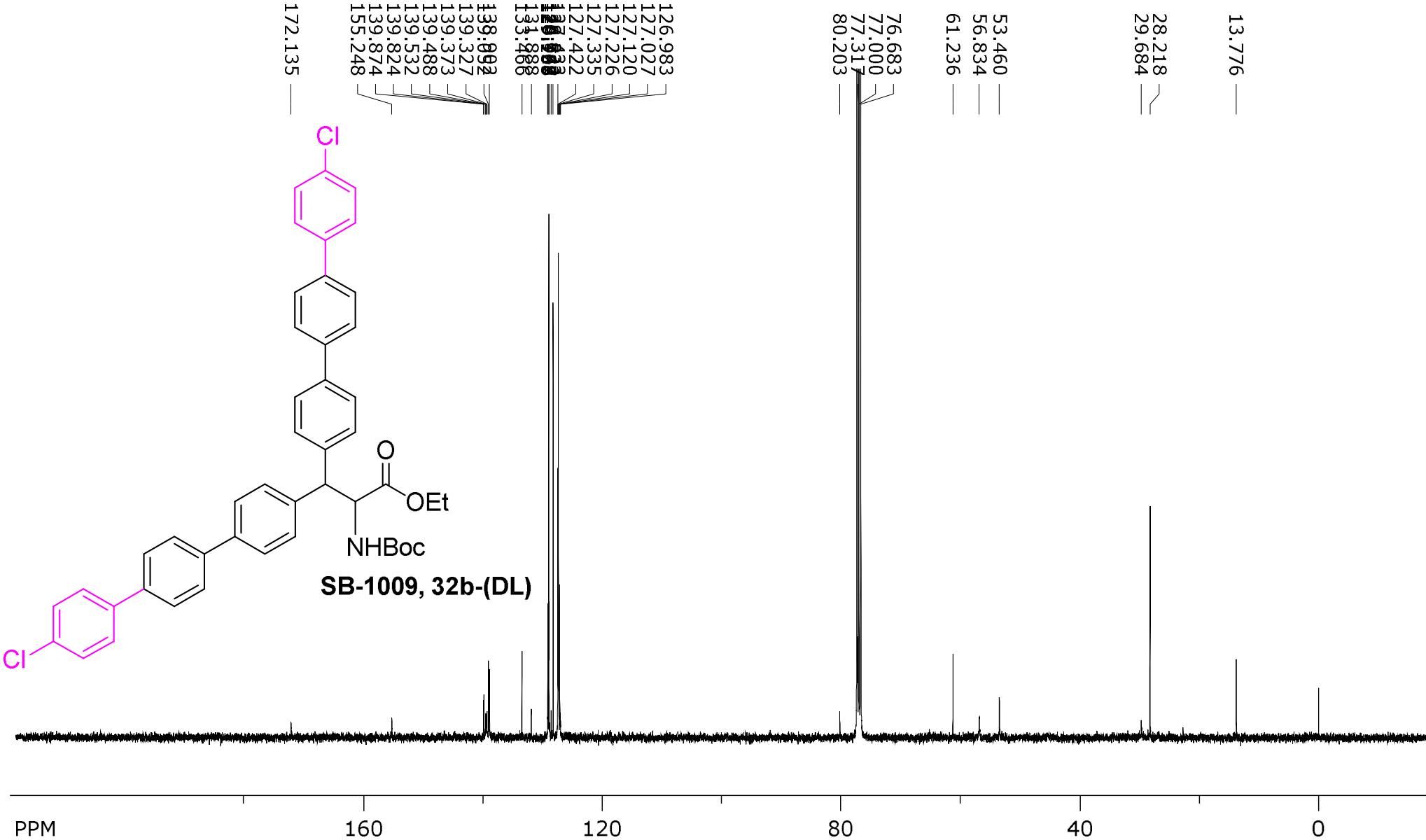


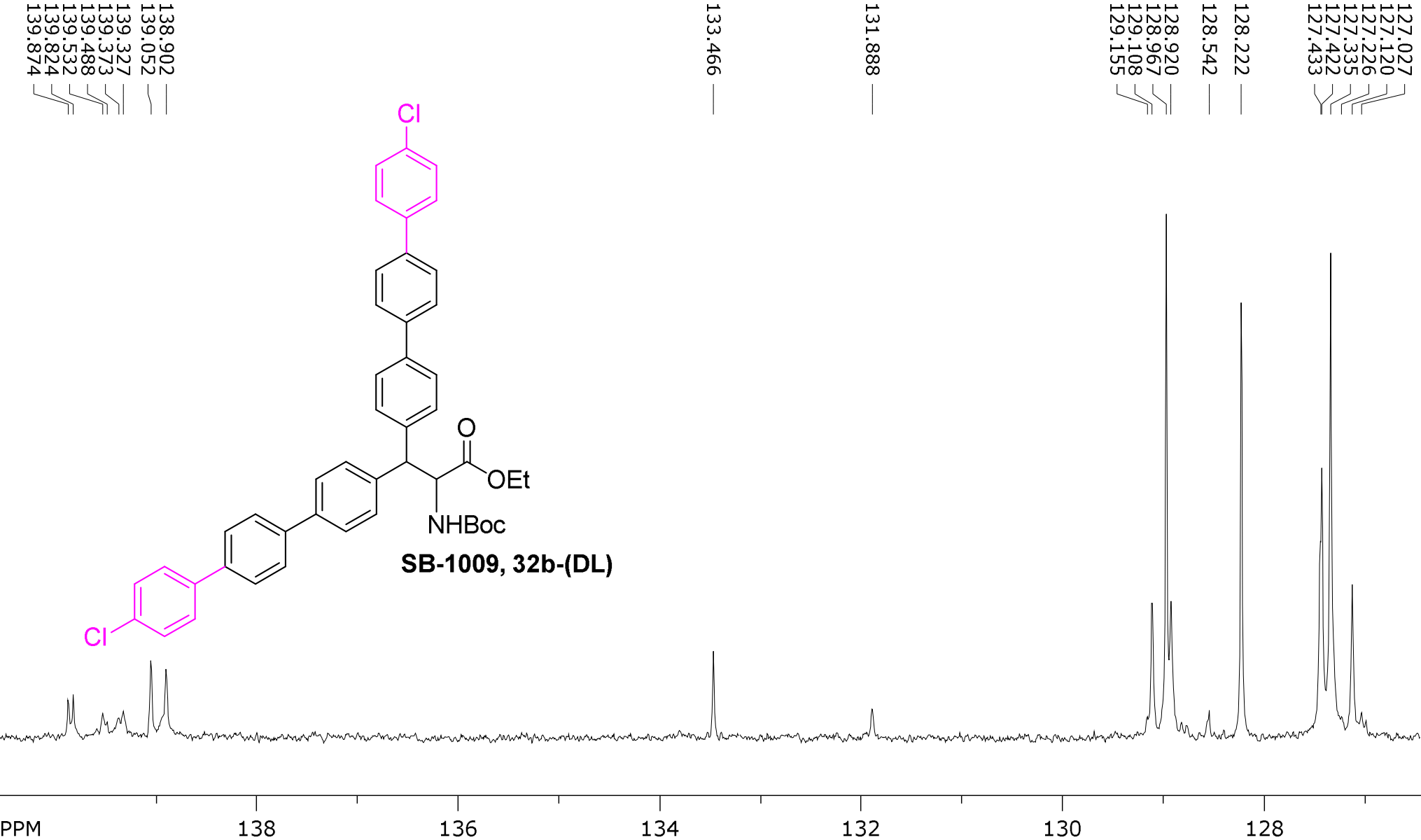


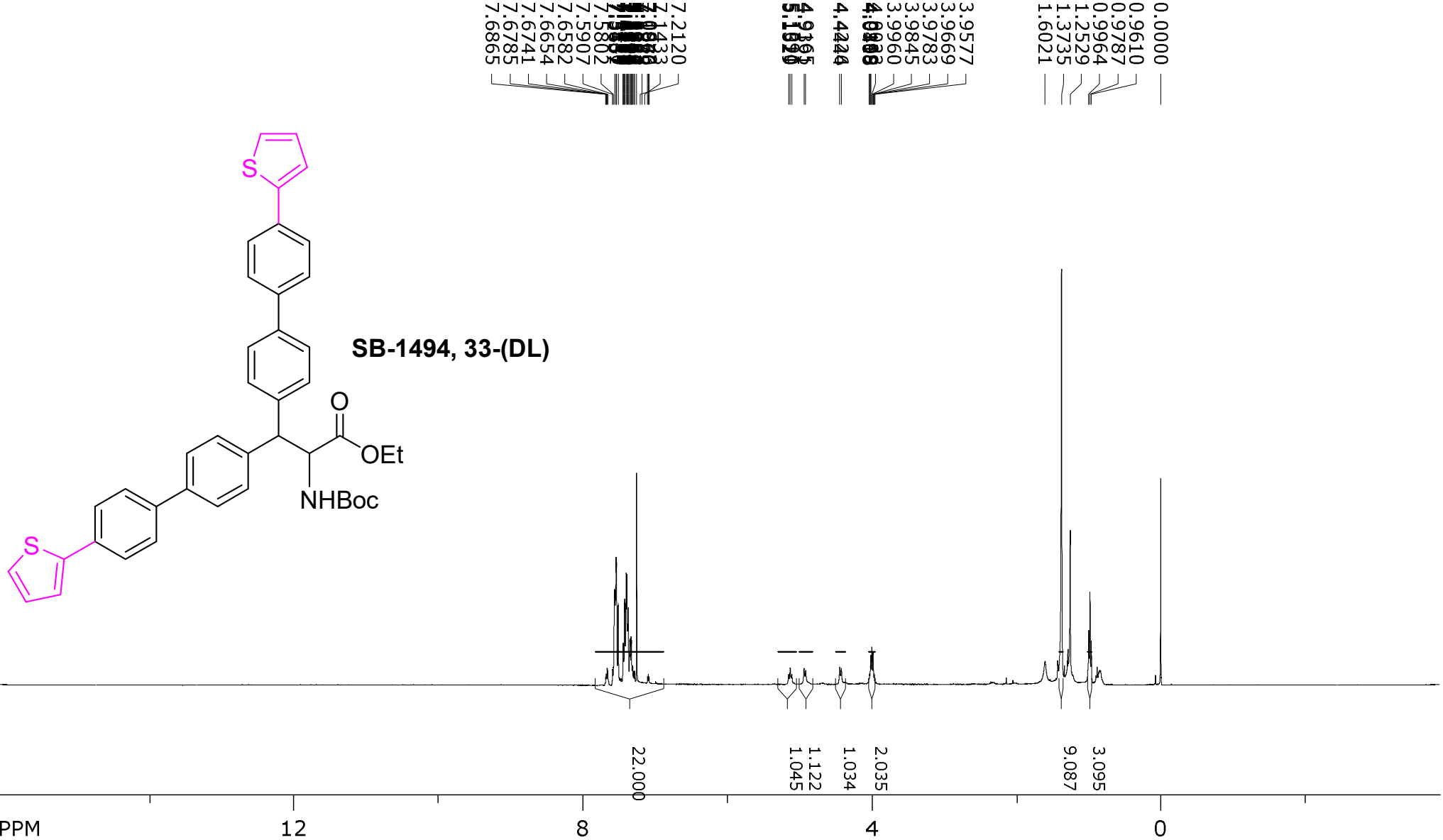


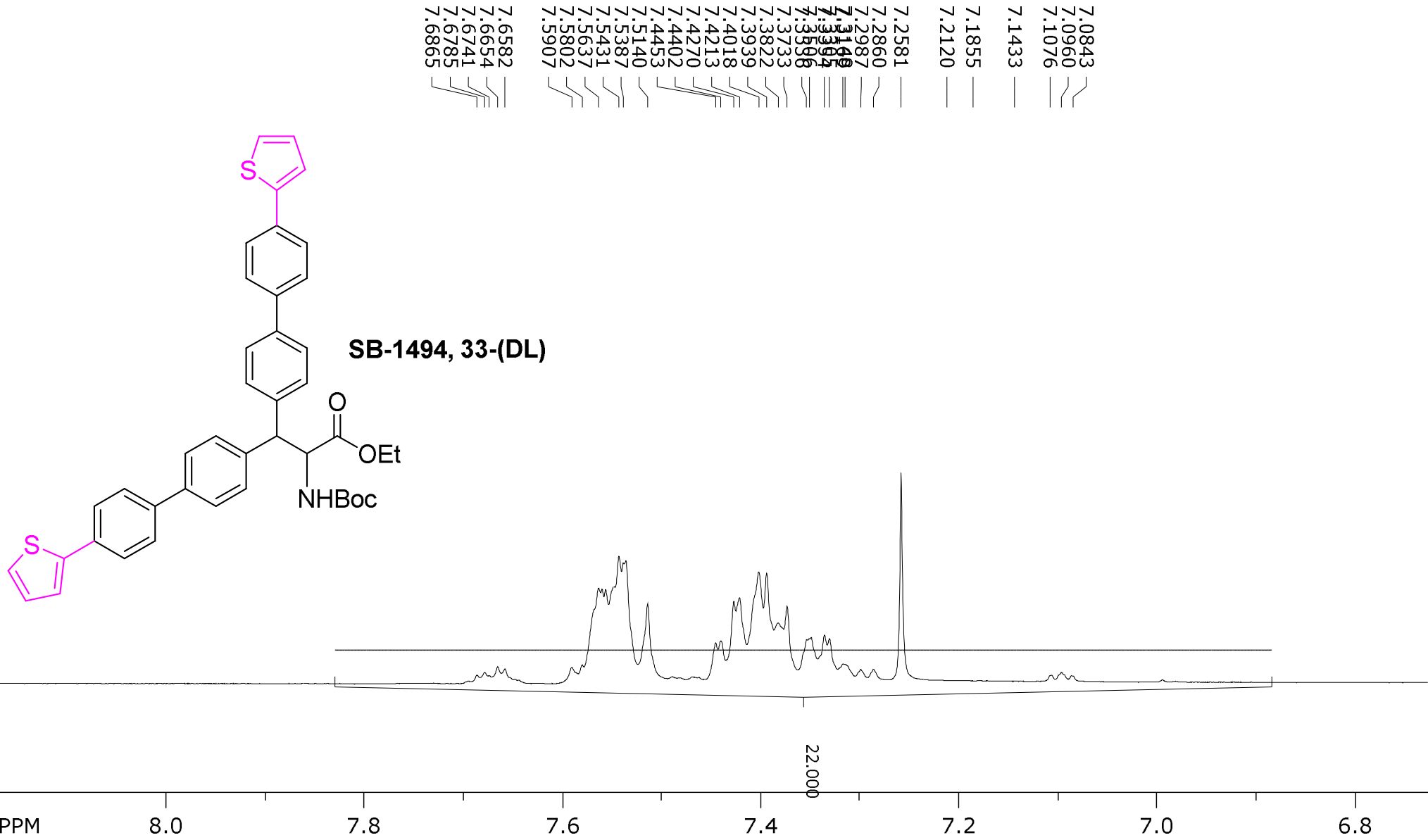


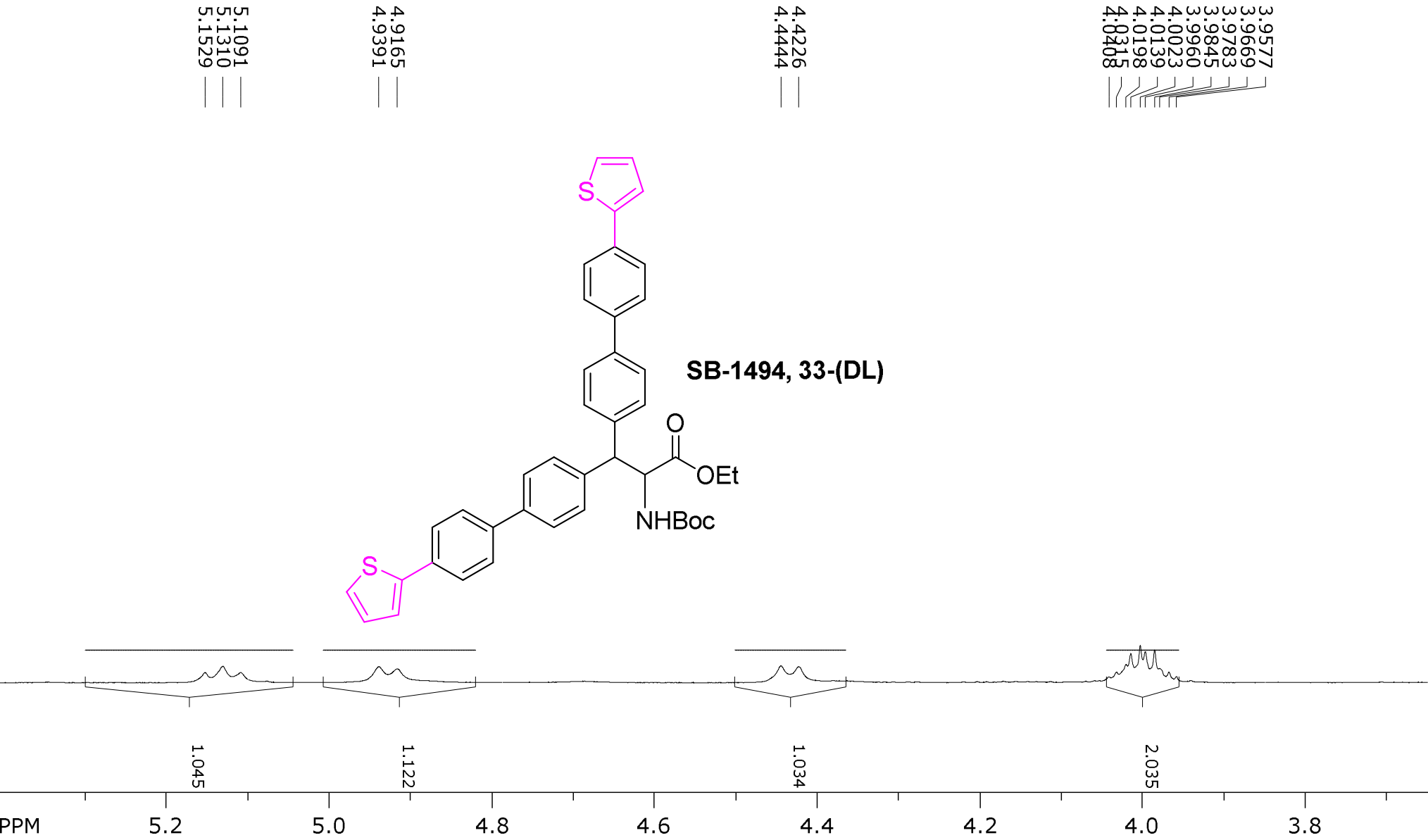


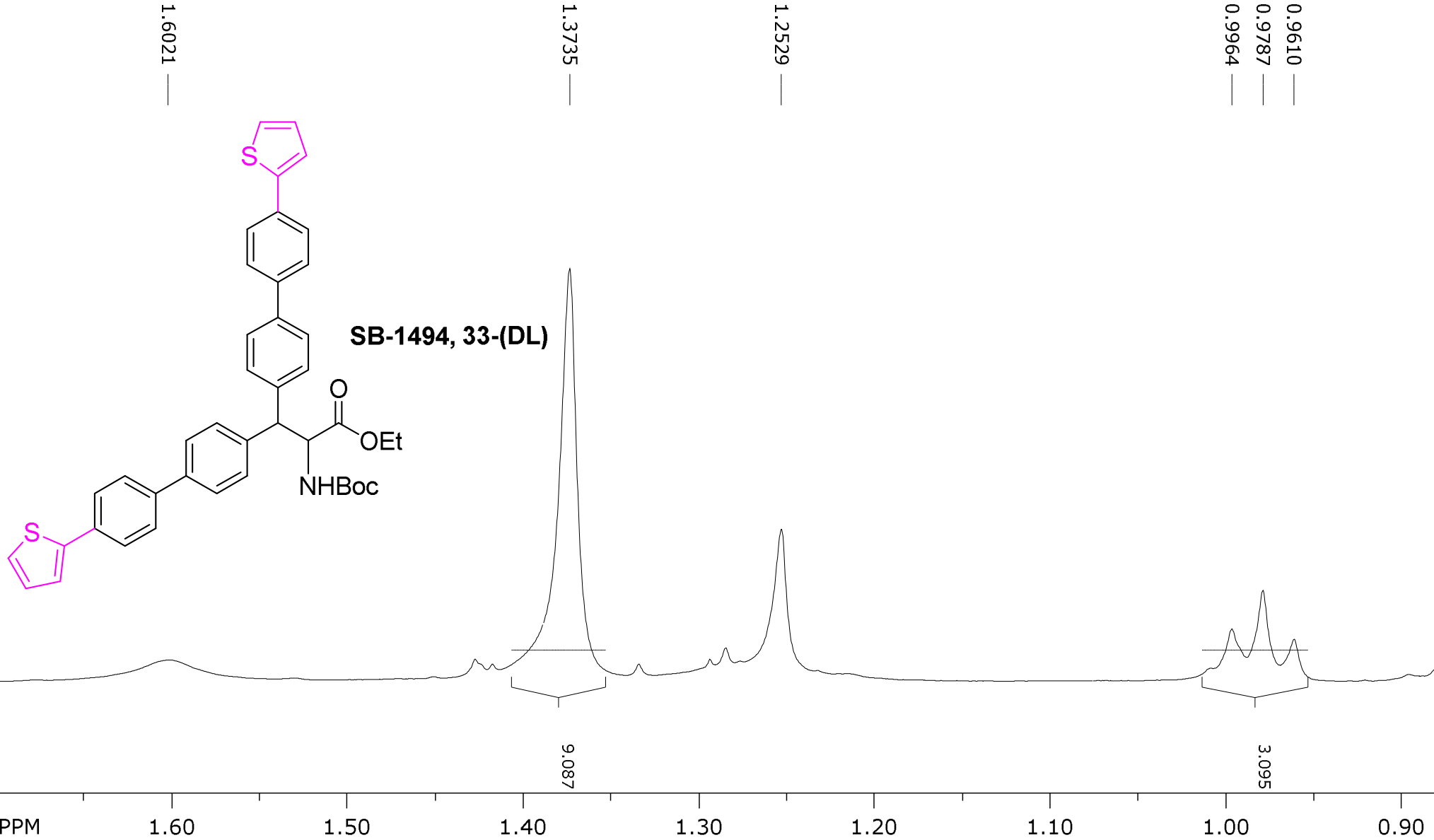


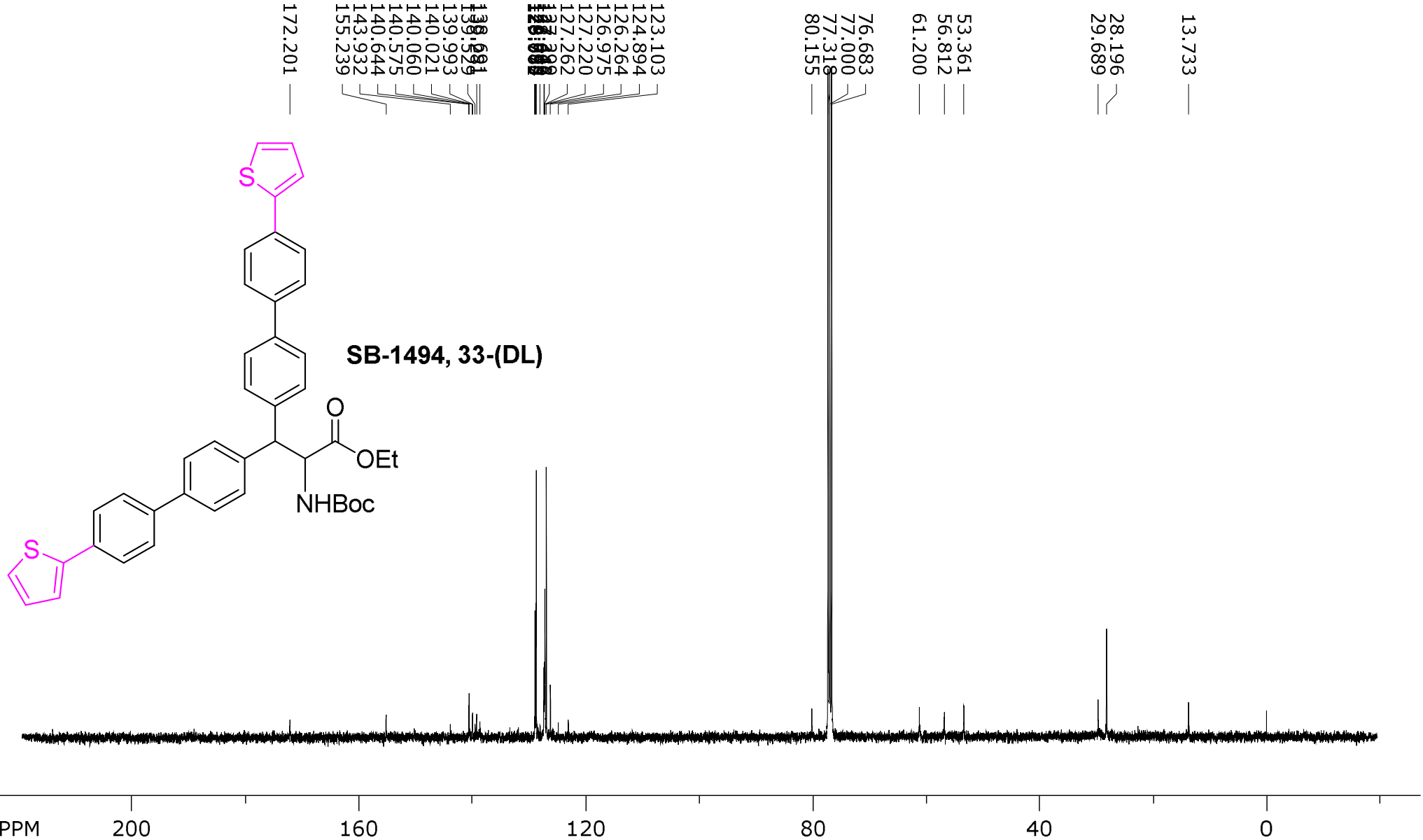


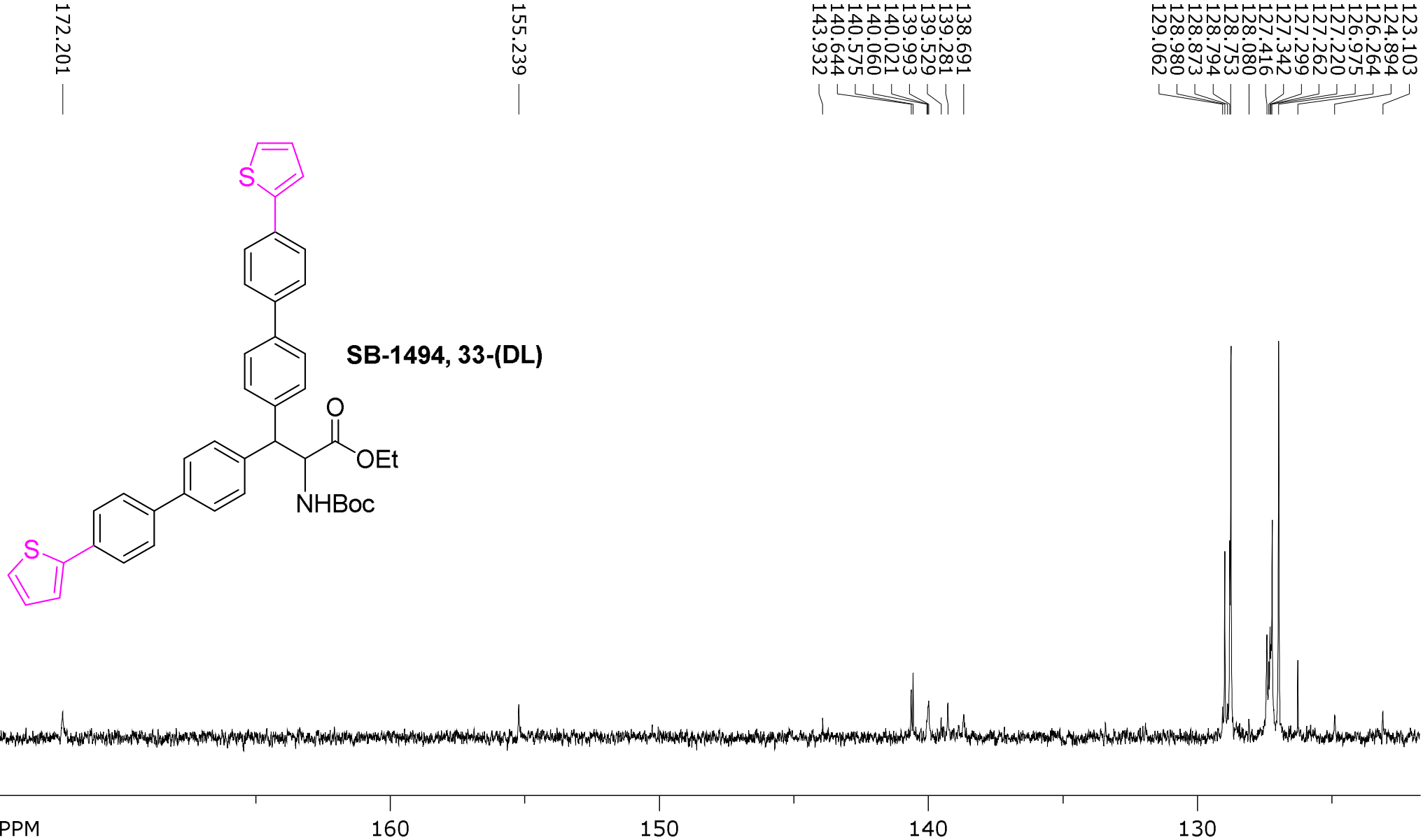


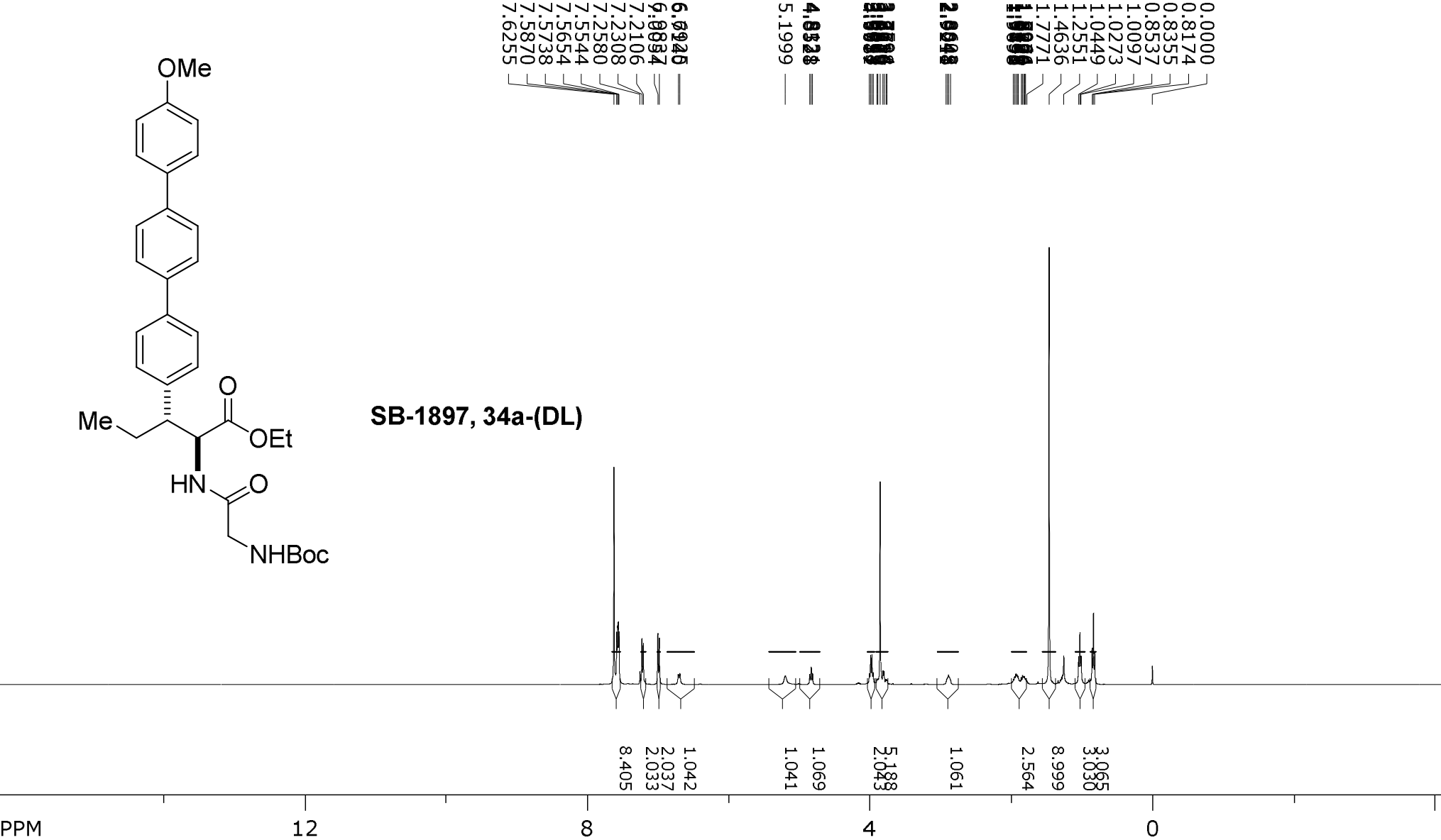


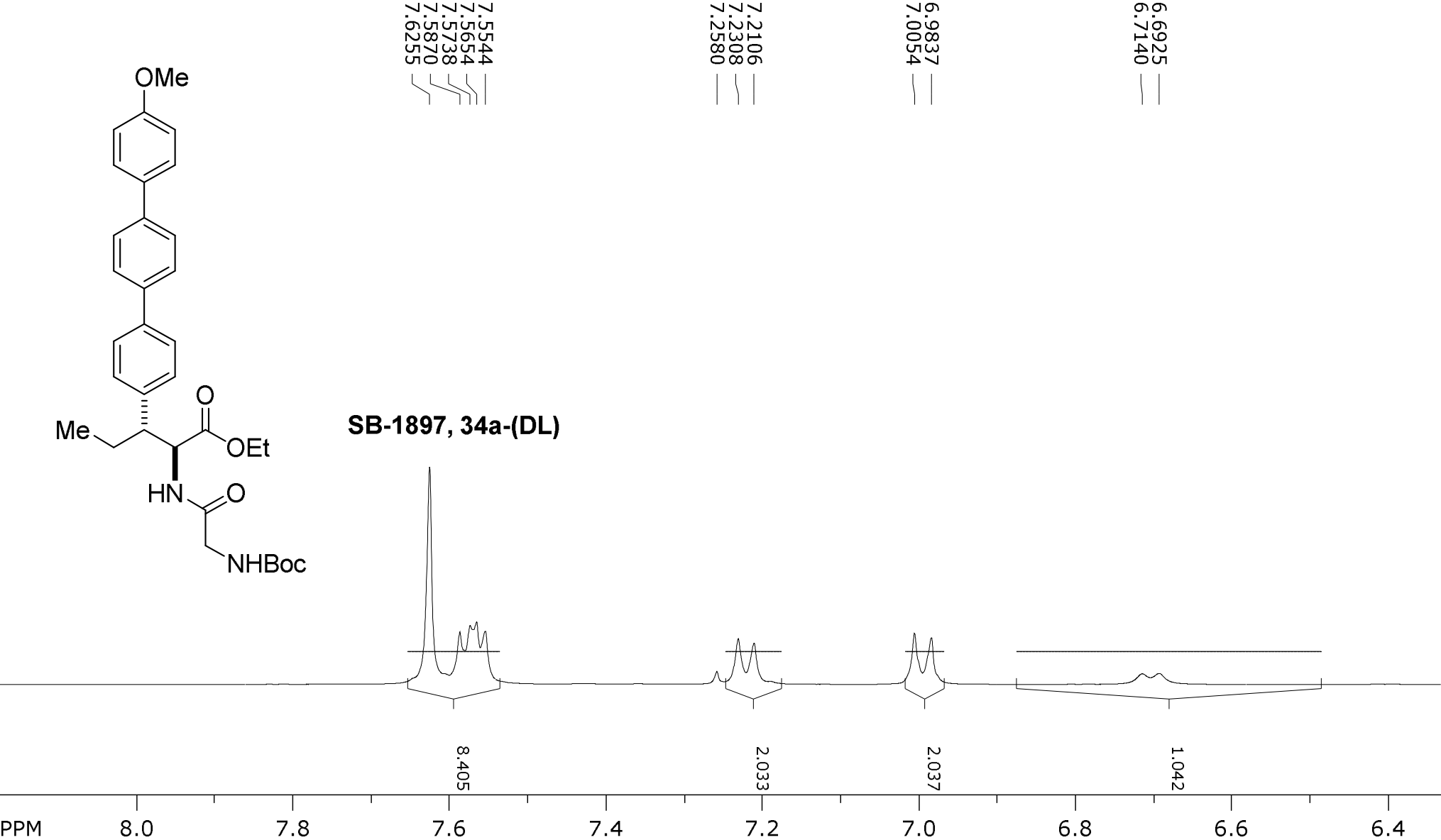


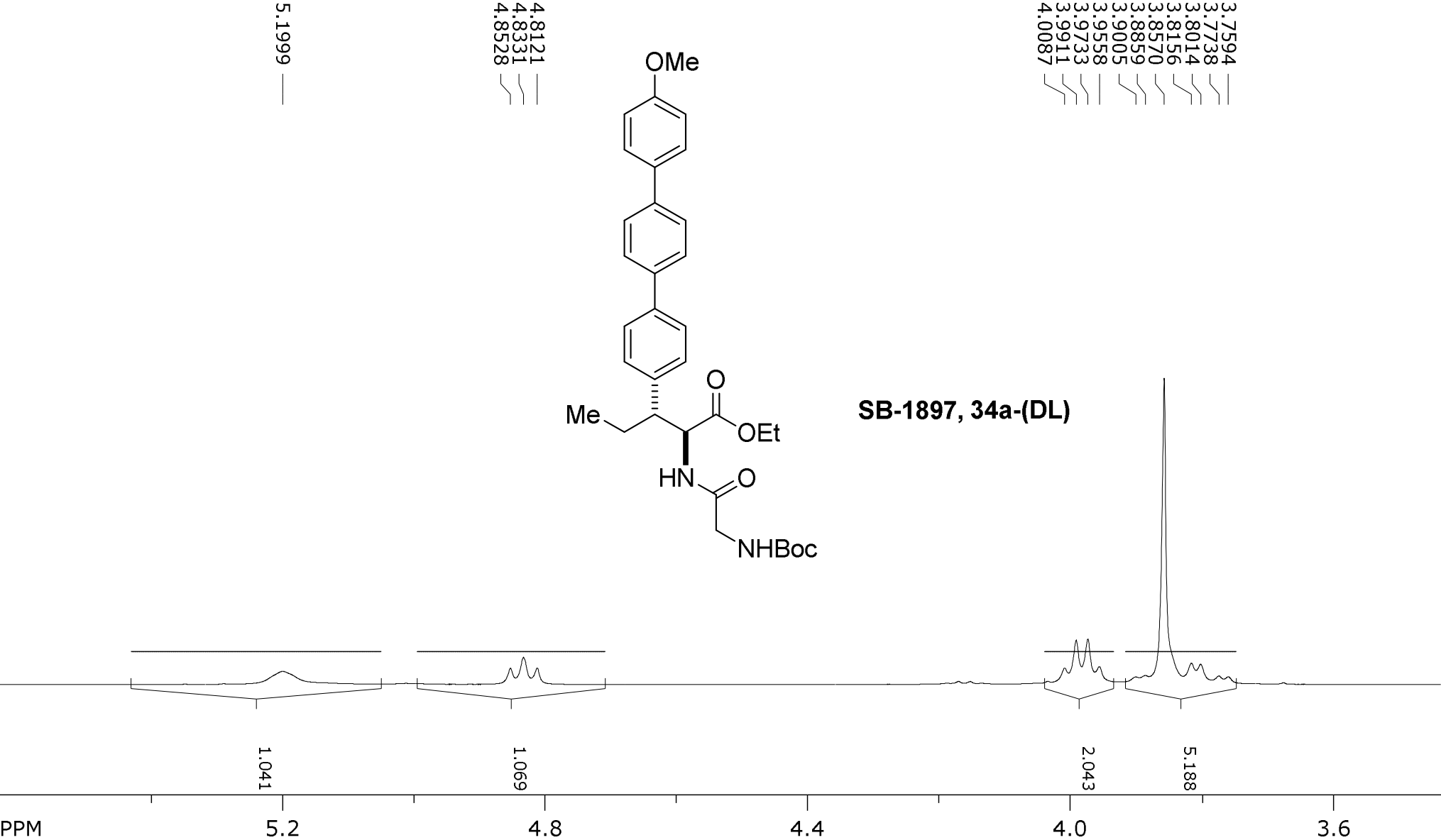


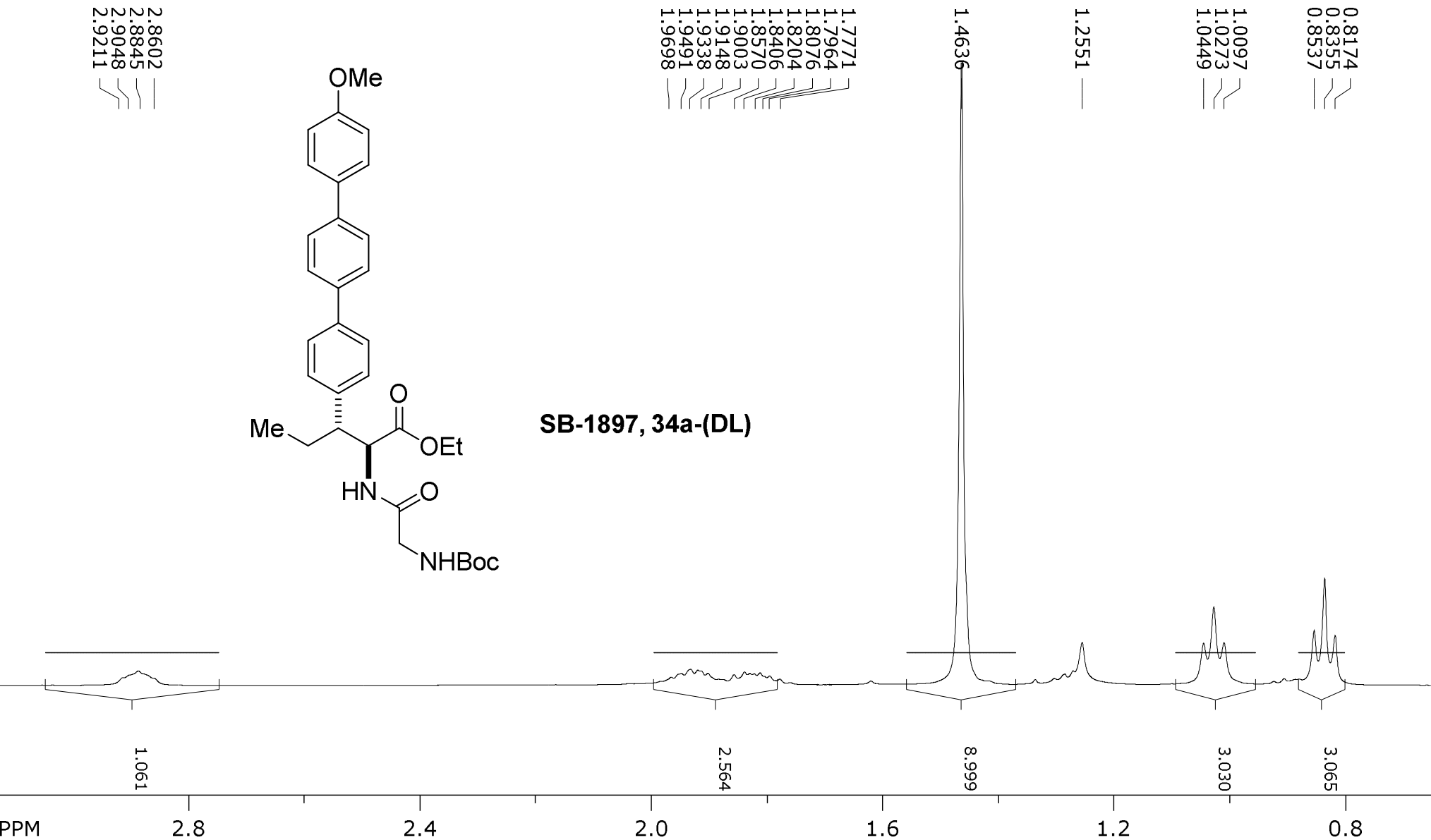


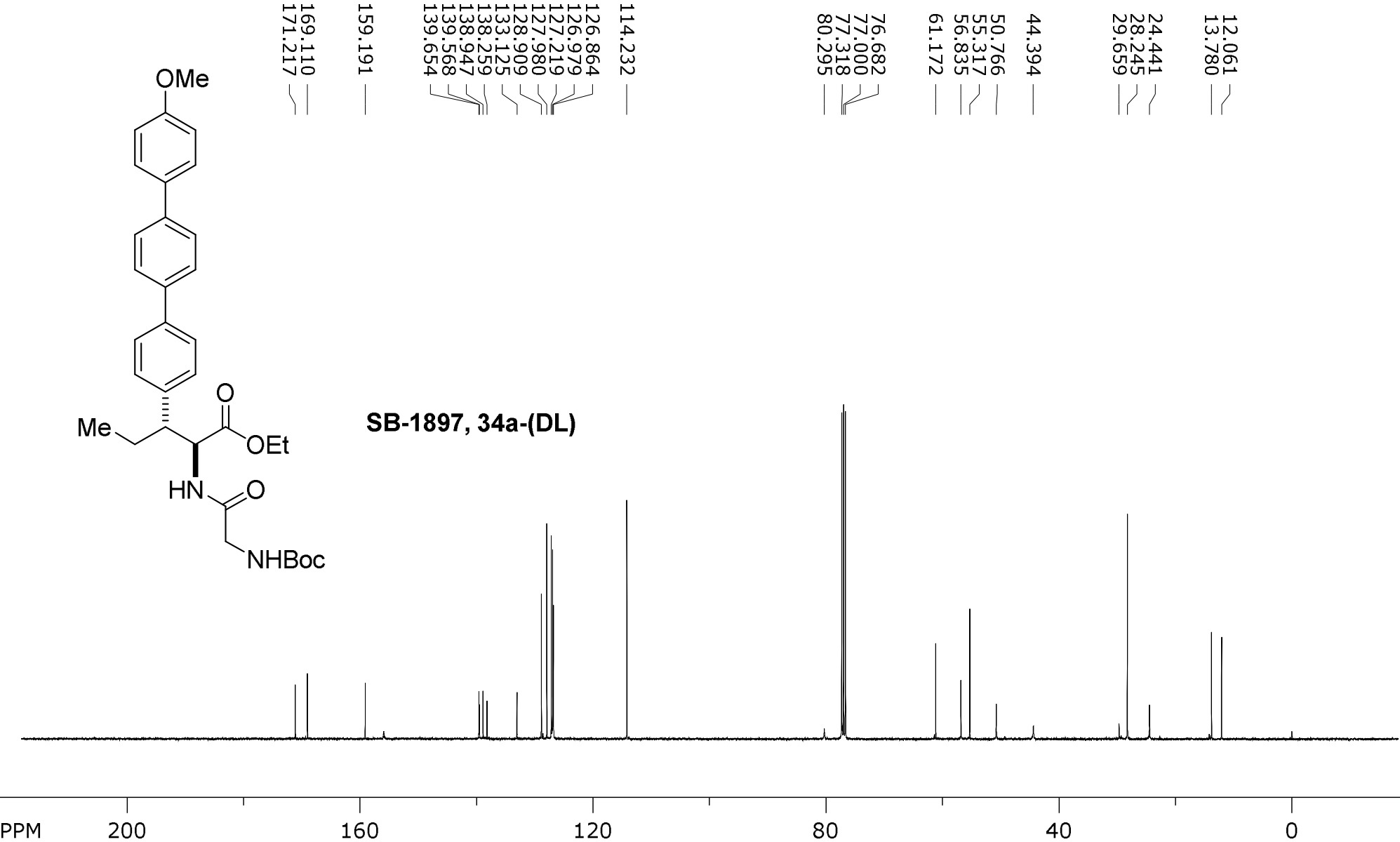


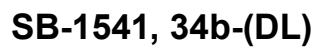


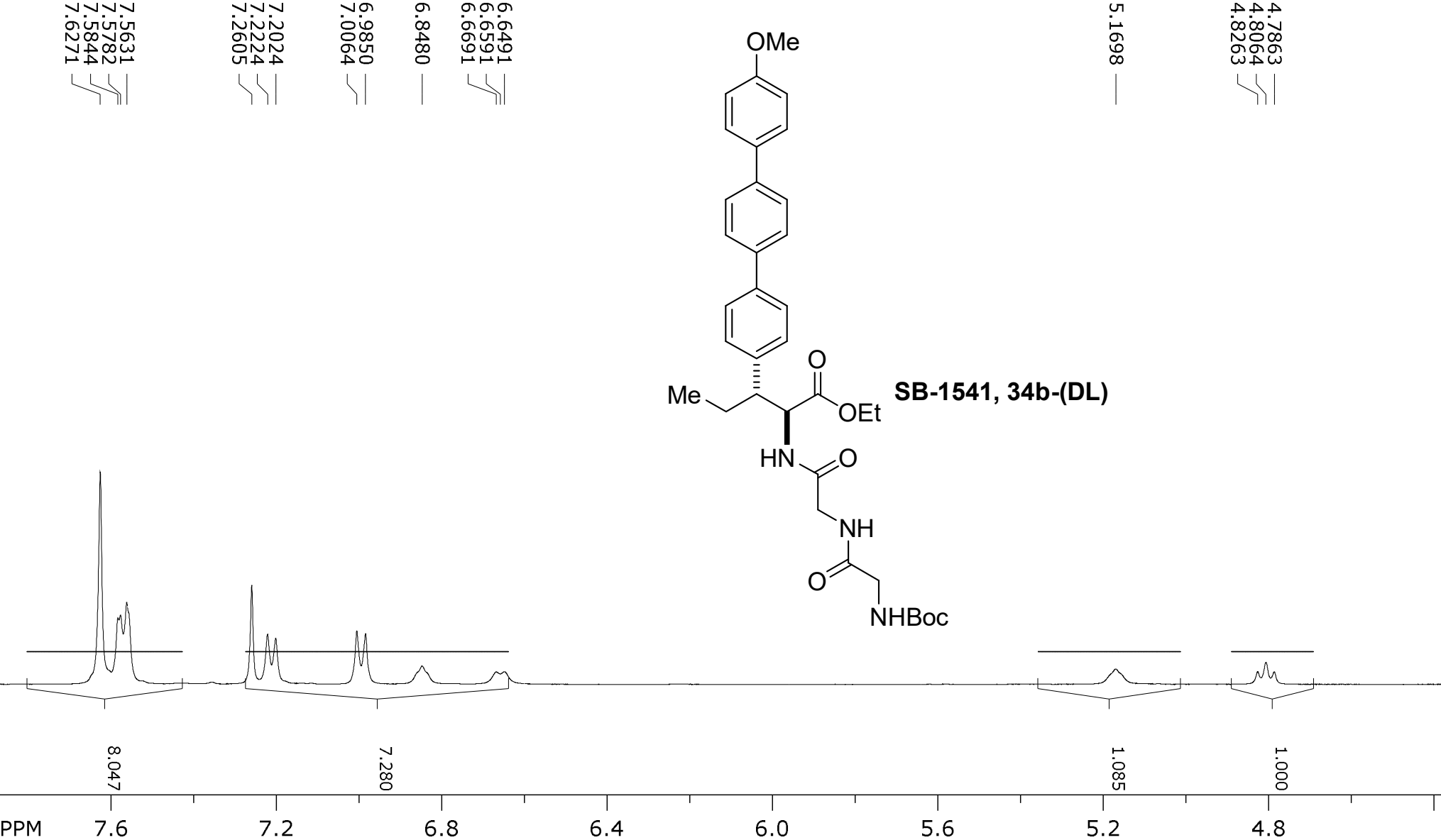


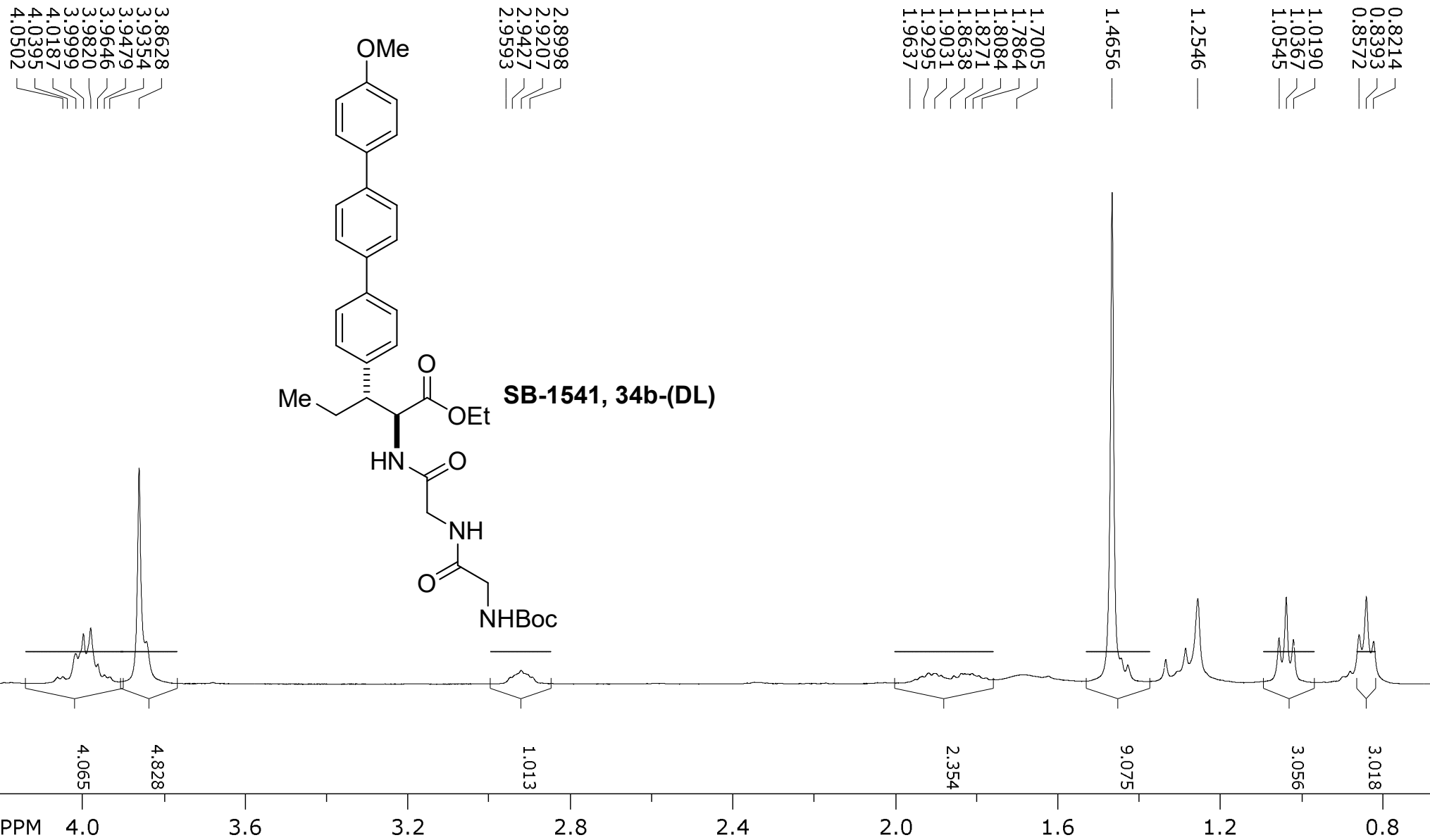


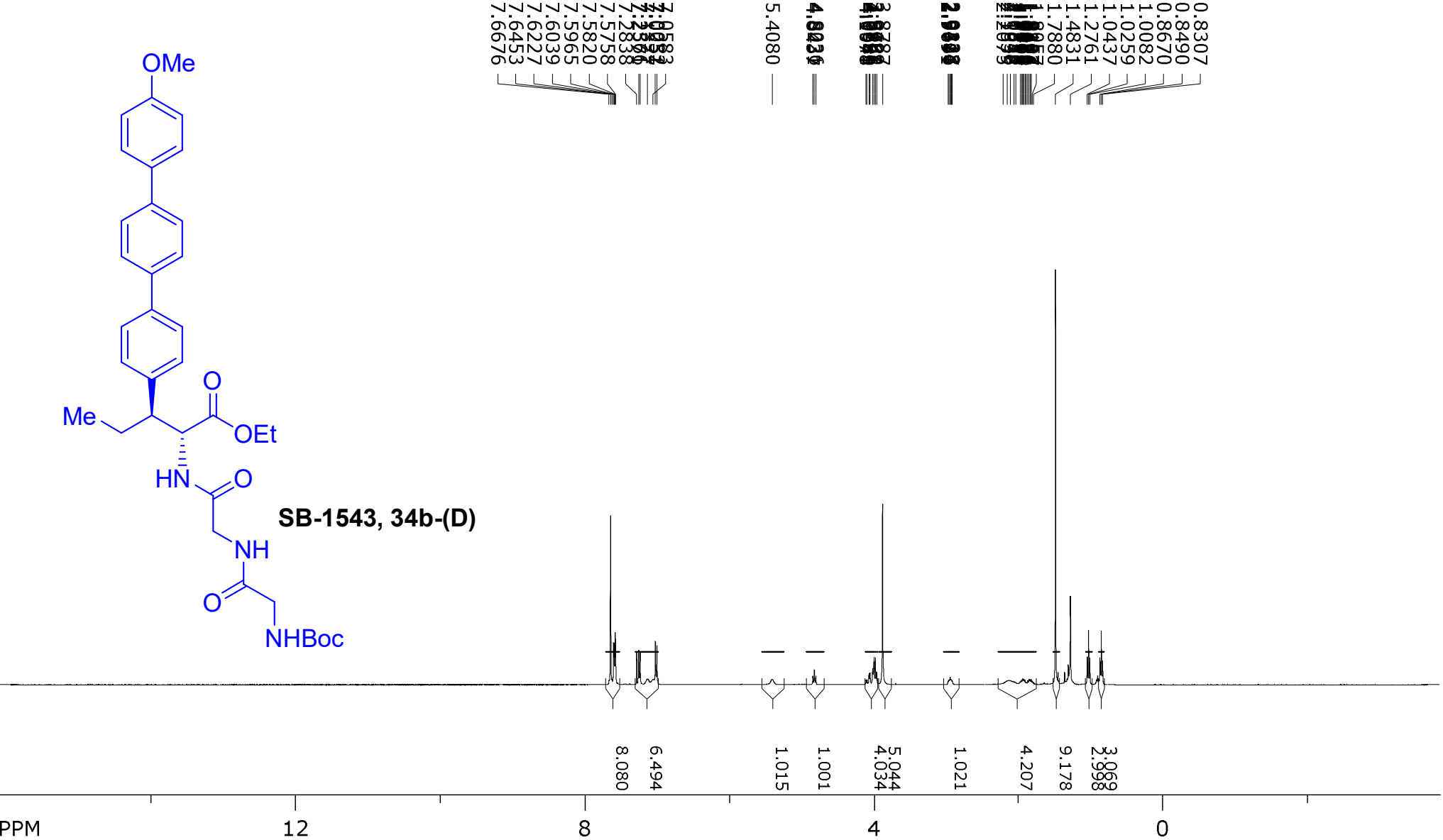


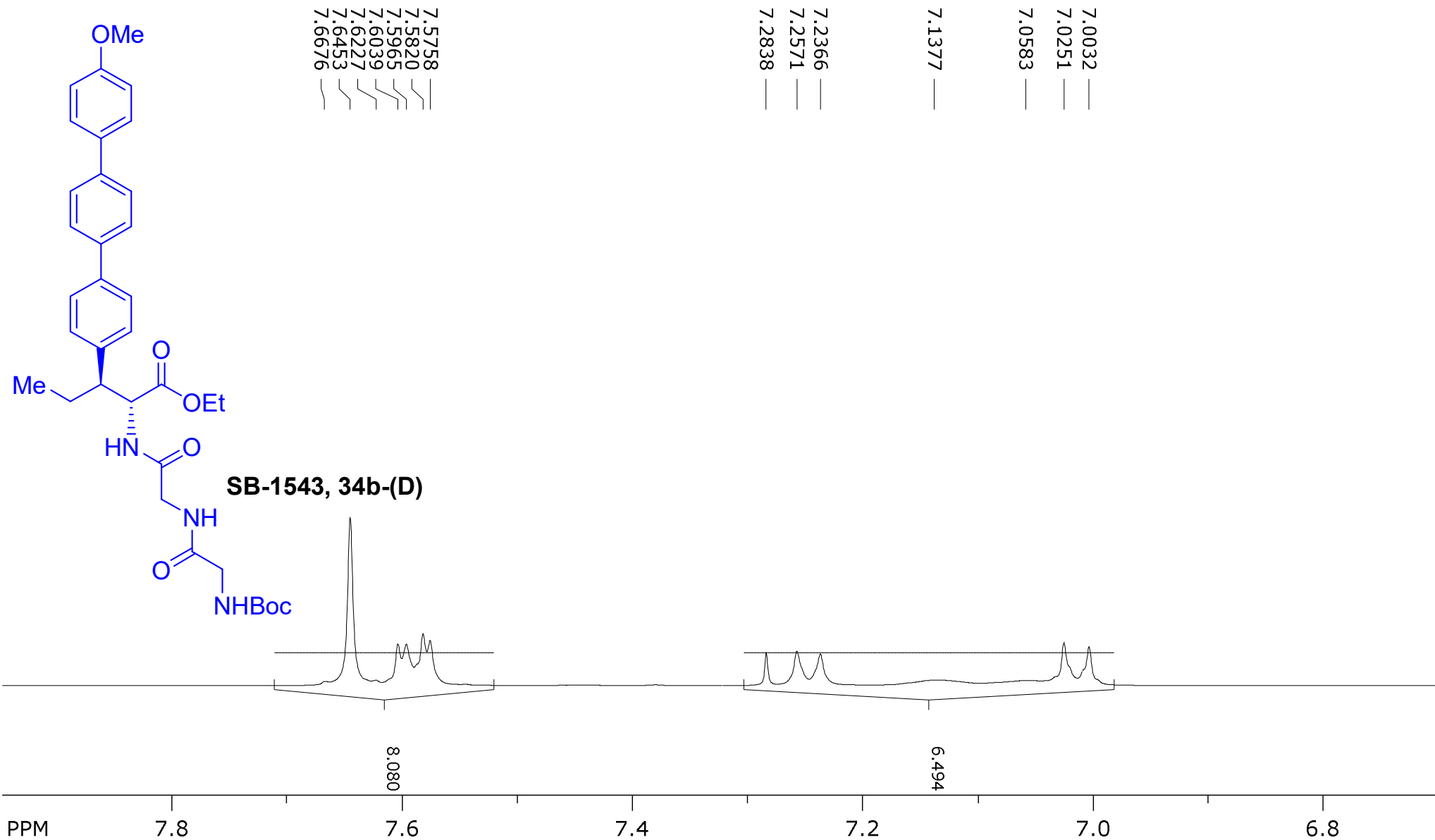
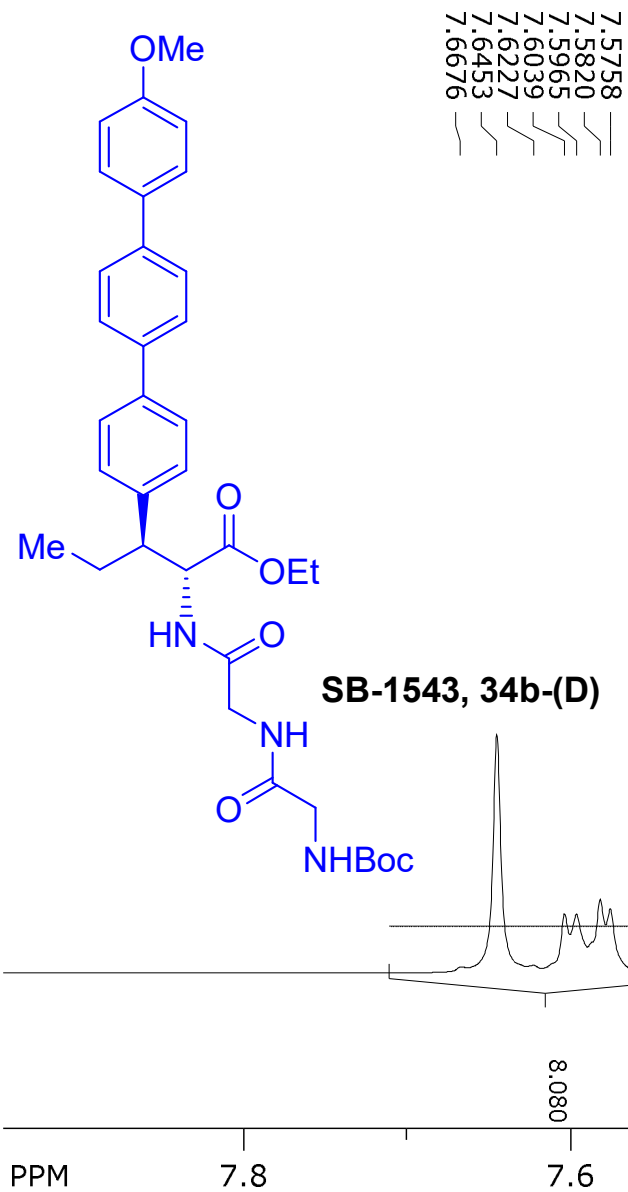


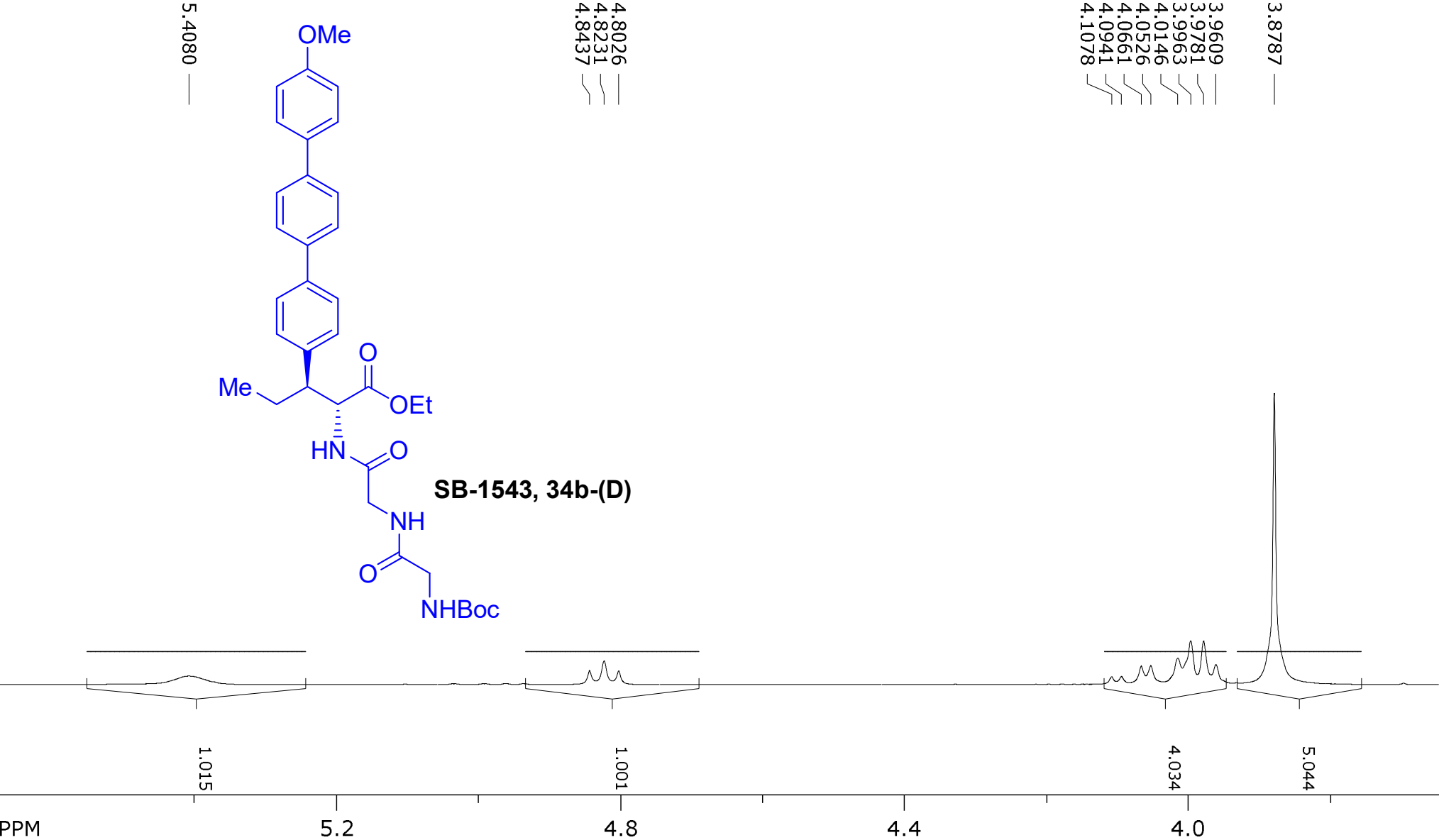


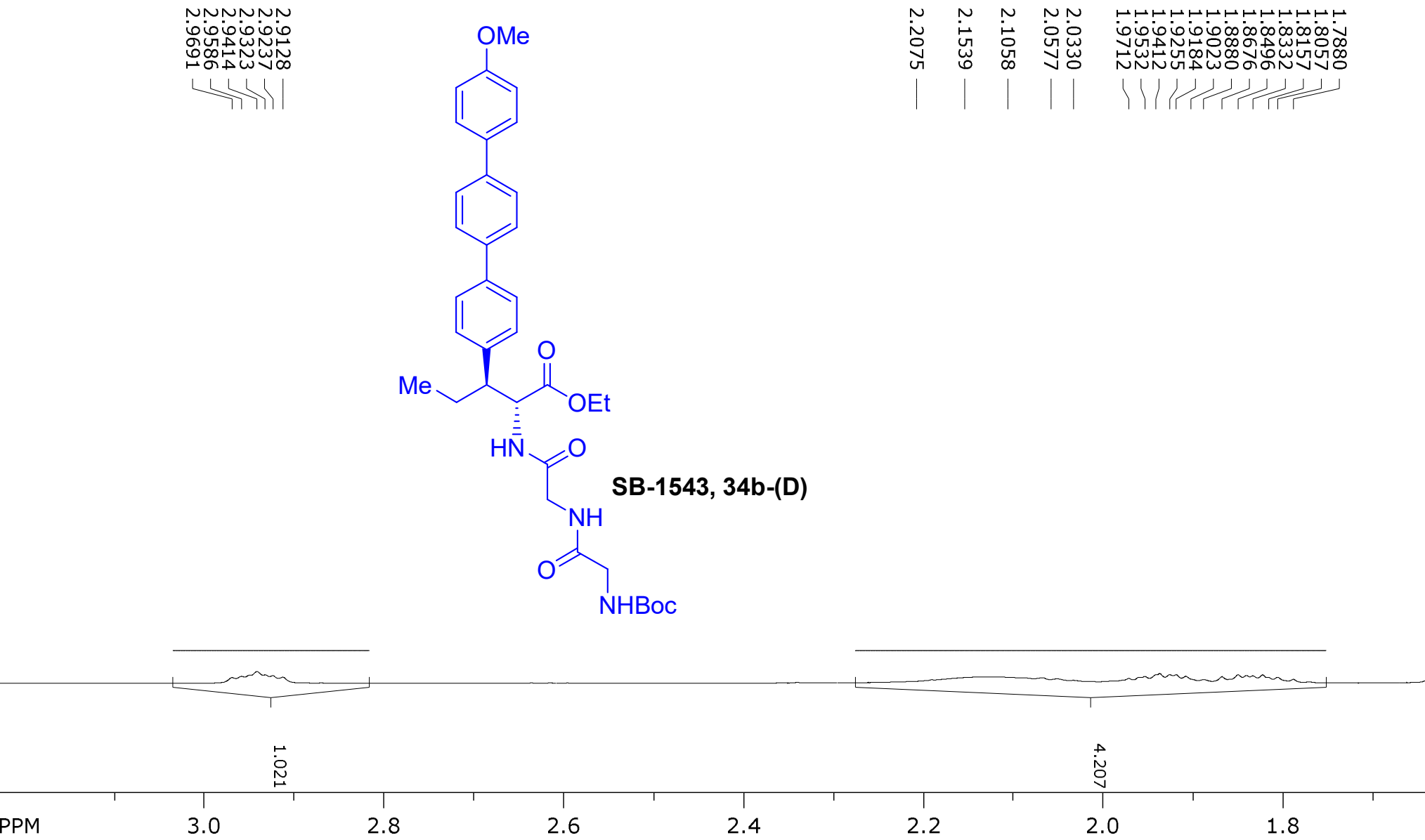


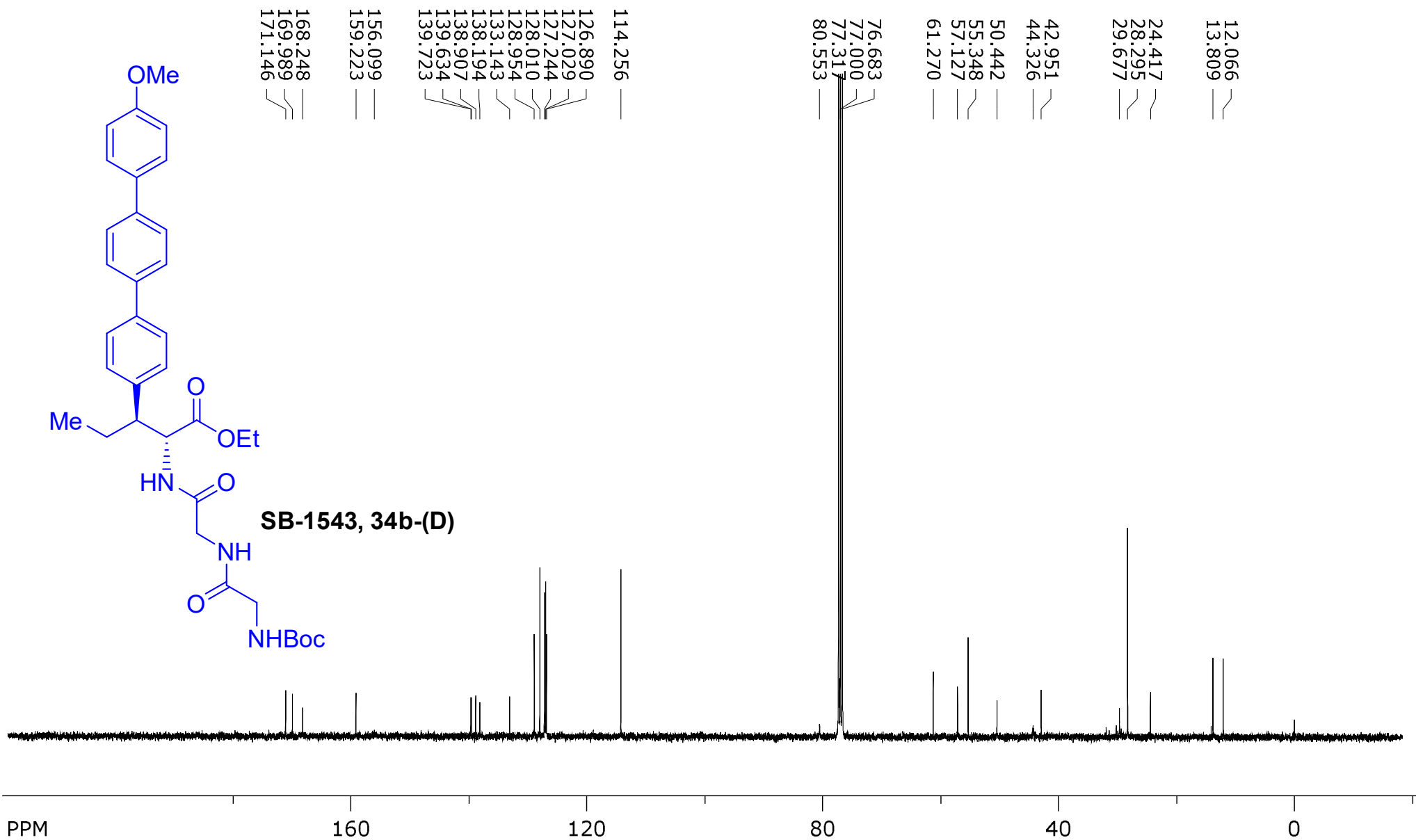


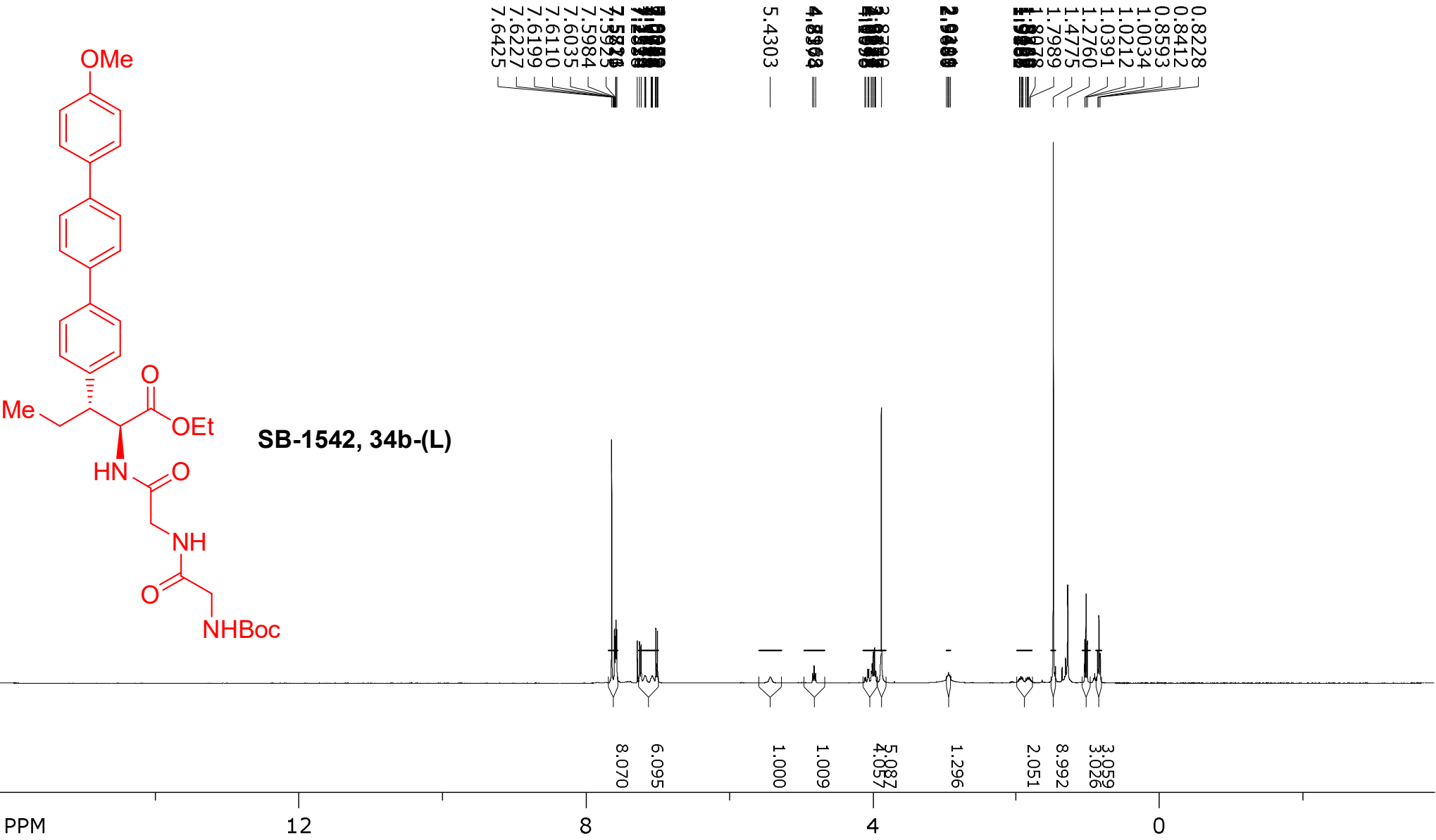


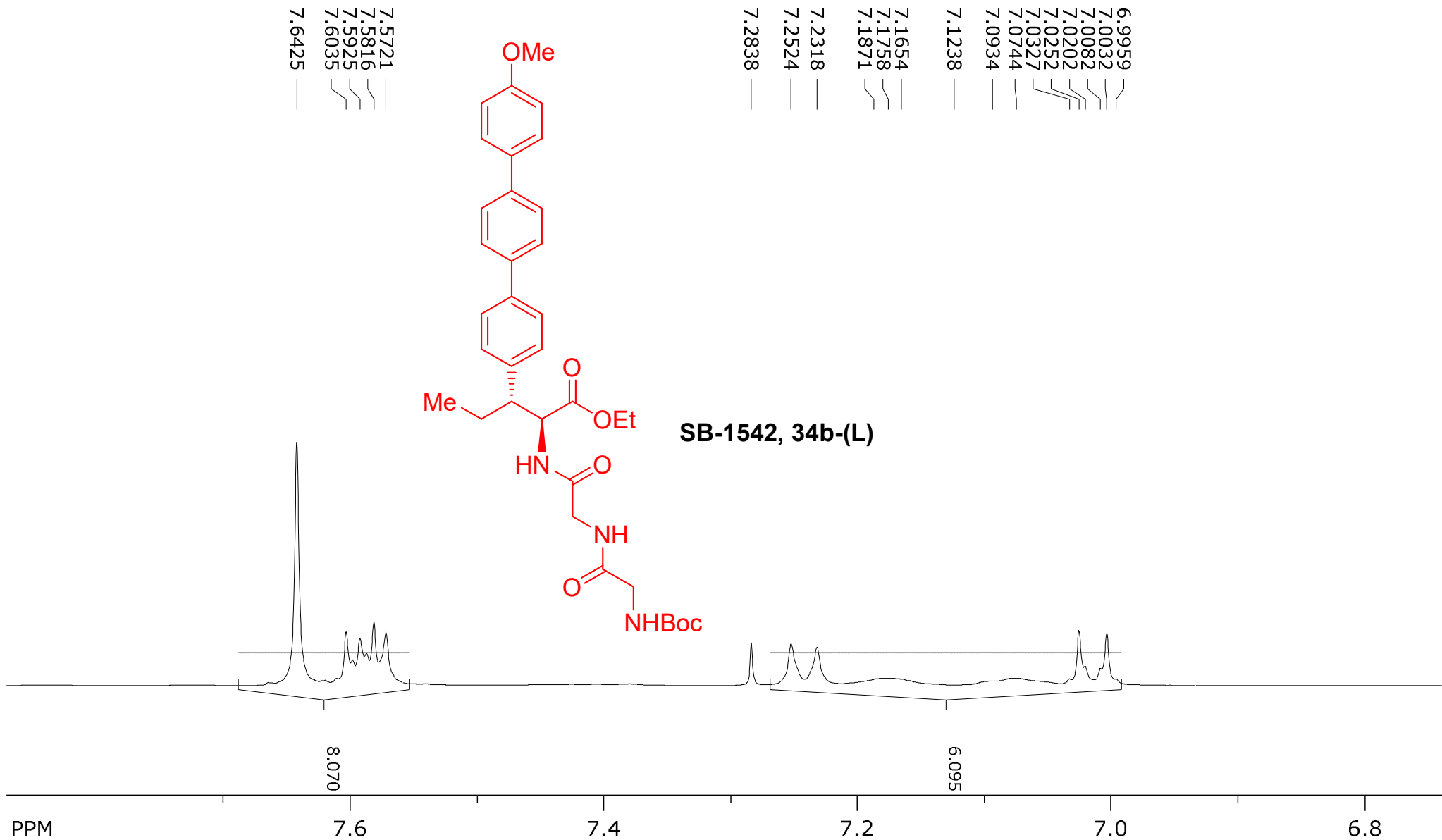


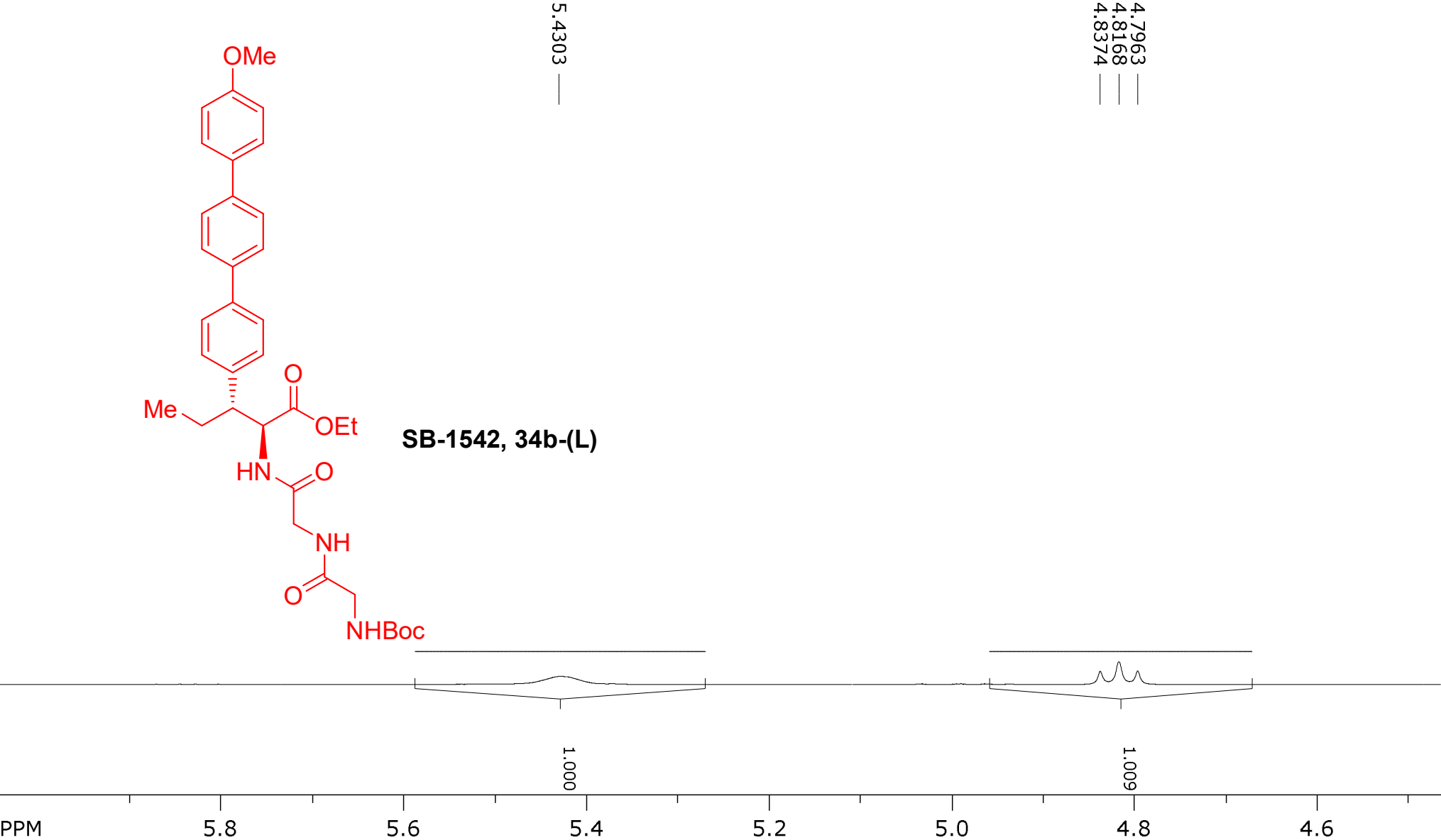


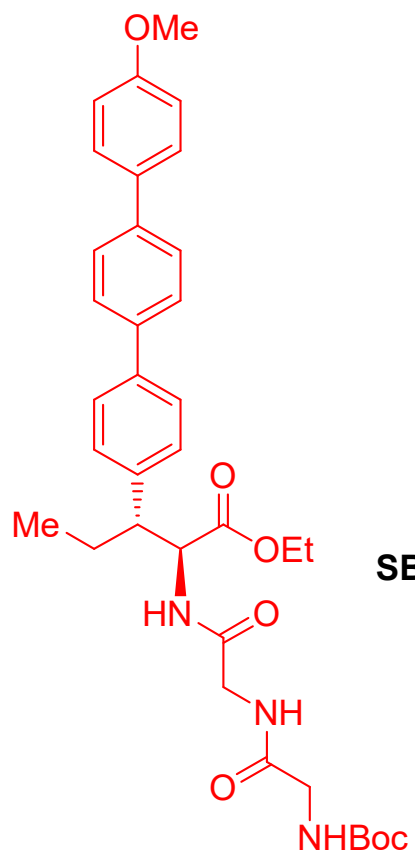
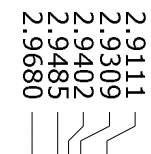




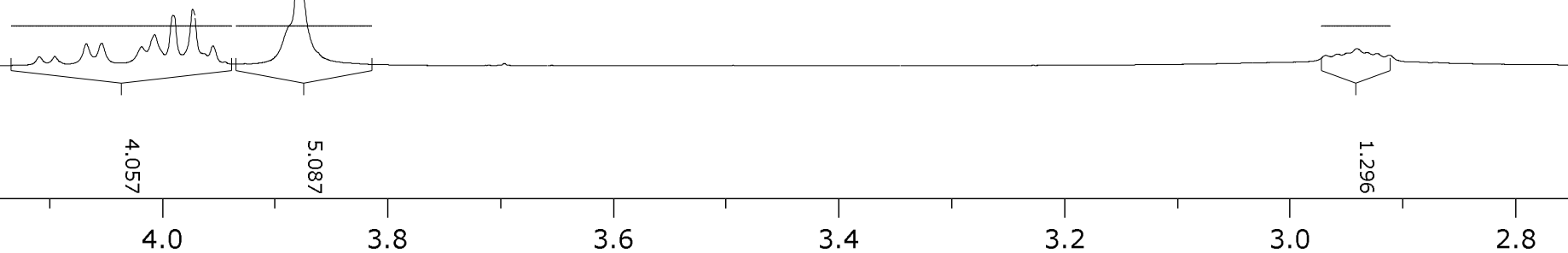


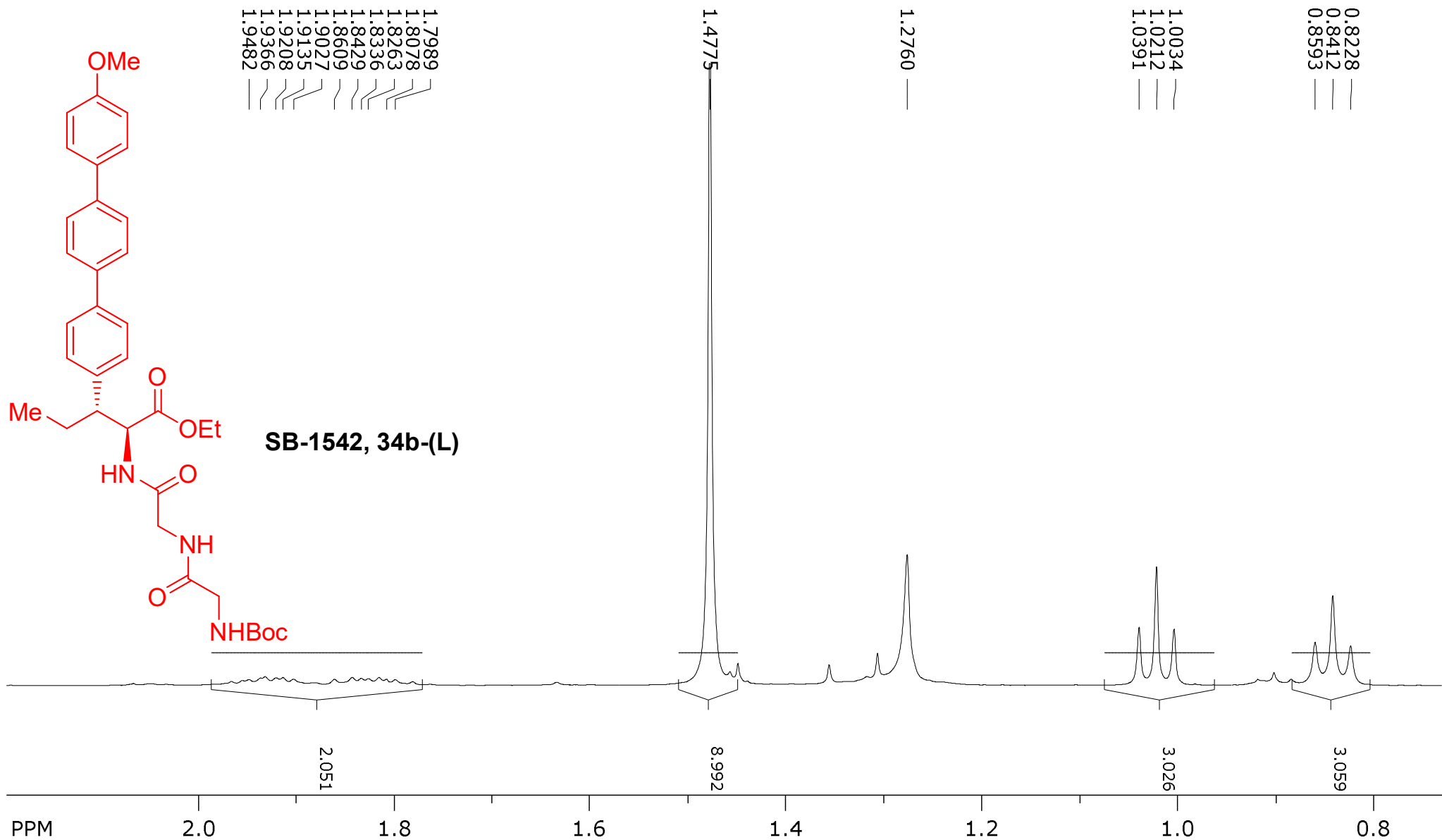


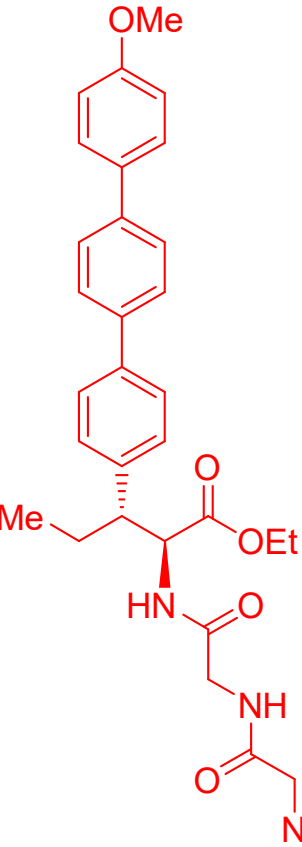




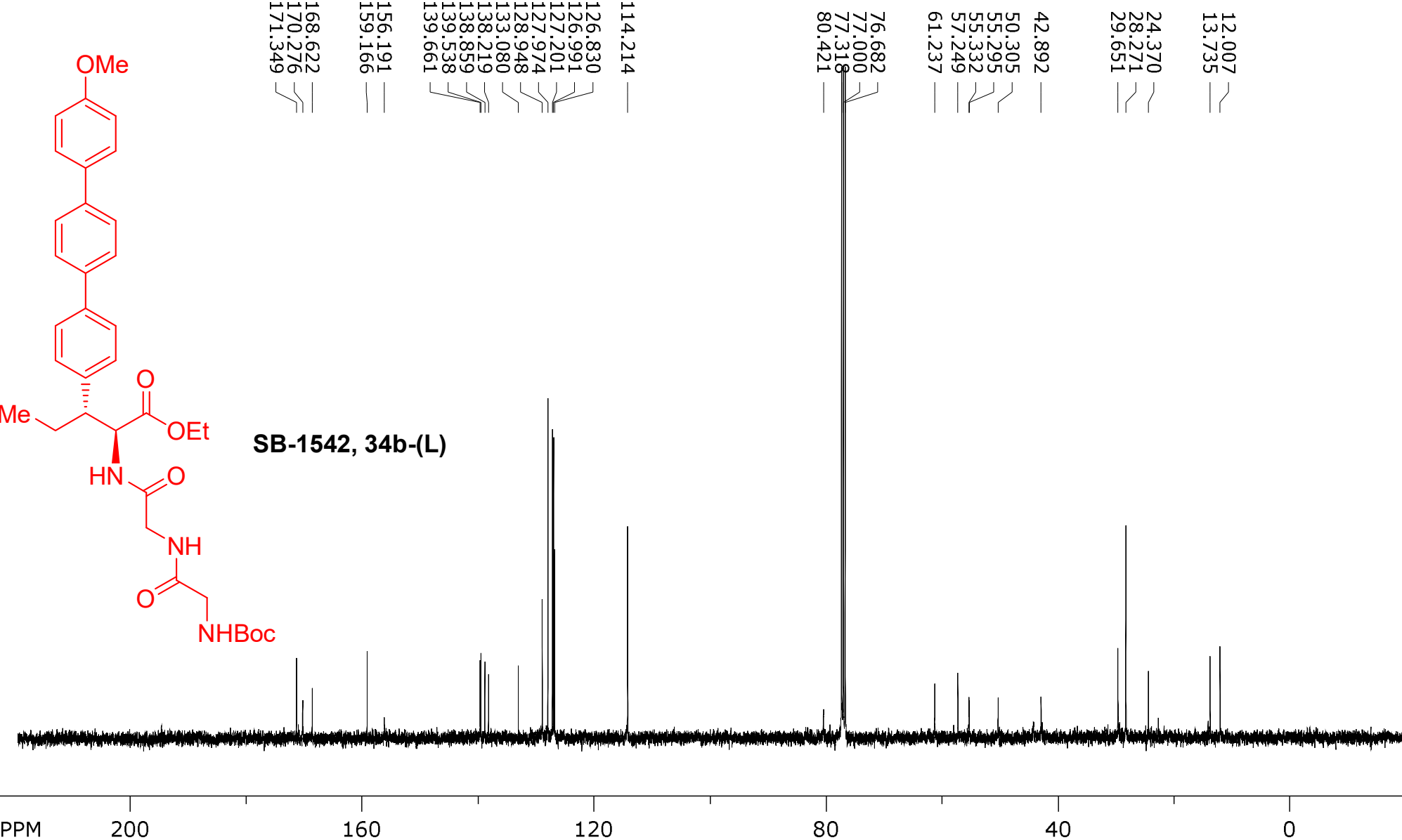
SB-1542, 34b-(L)

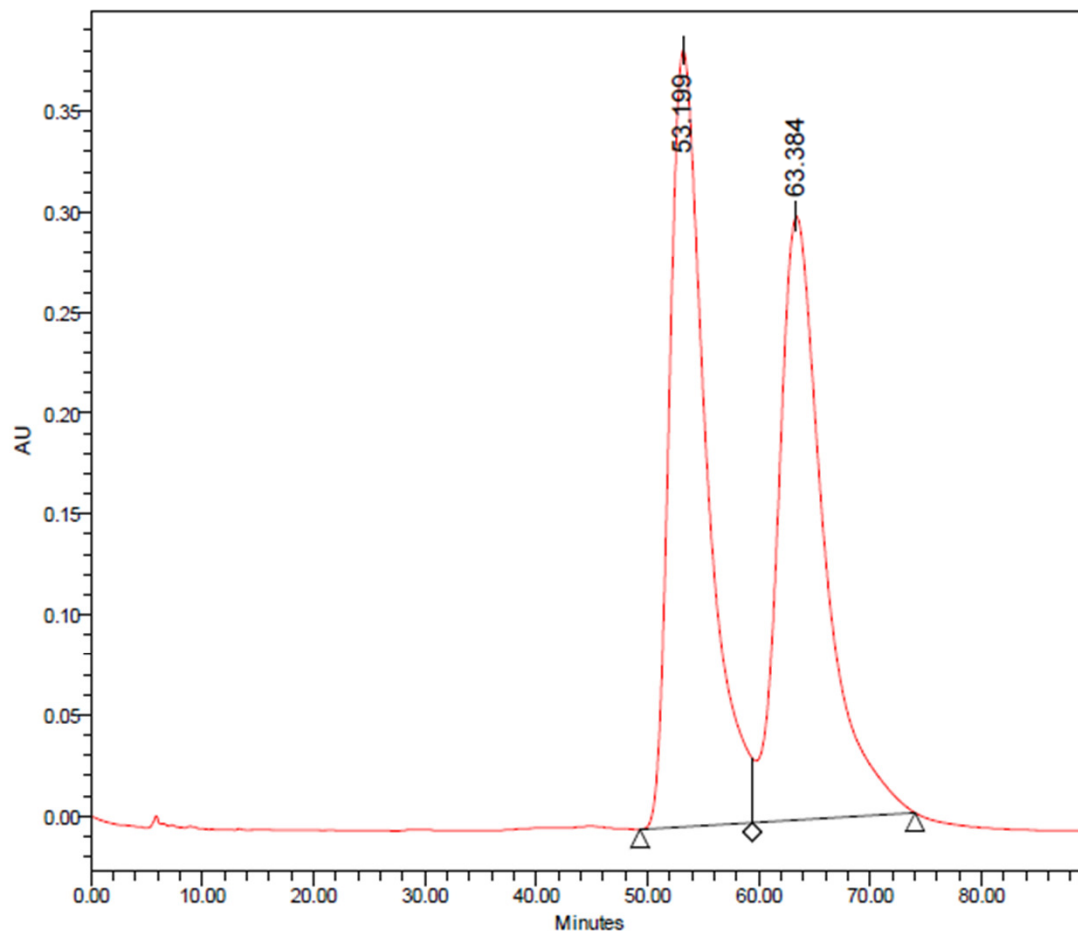




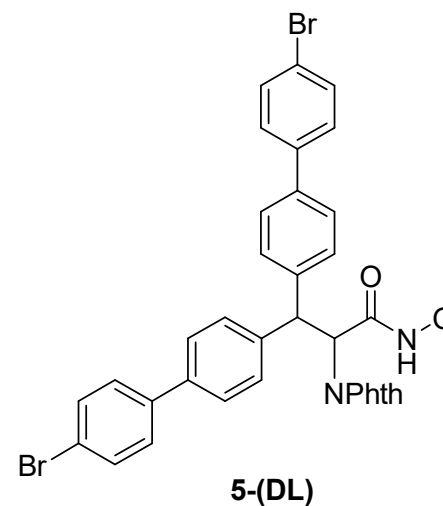


SB-1542, 34b-(L)





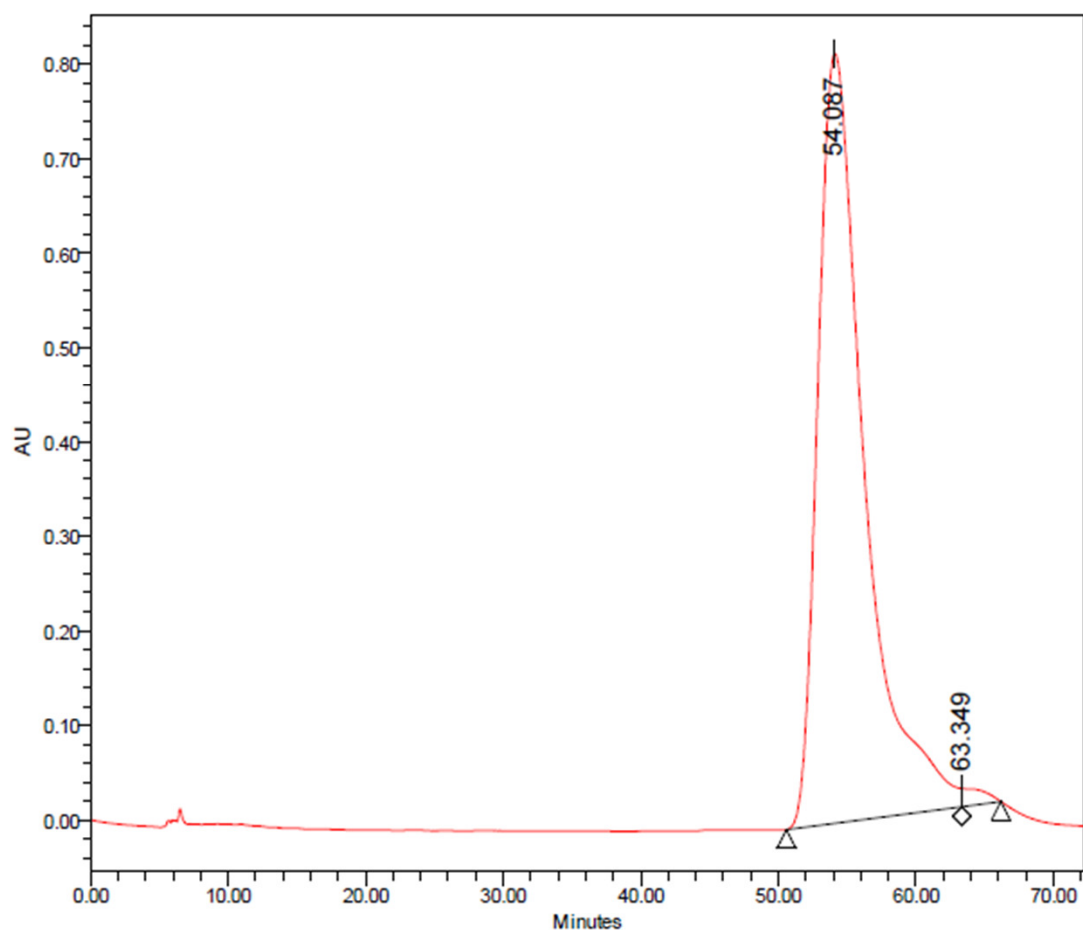
Sample Name: sb131 rep hex ipa 8020 ic fr1; Date Acquired: 08-05-2023
20:20:03 IST; Vial: 1; Injection: 3



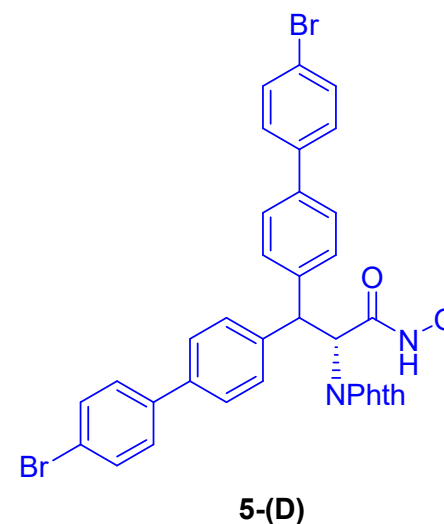
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb131 rep hex ipa 8020 ic fr1	1	3	63.384	85584359	49.15	300175
2	sb131 rep hex ipa 8020 ic fr1	1	3	53.199	88551052	50.85	385591
Mean				58.292			
Std. Dev.				7.202			

The HPLC of the compound **5-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 53.19$ min, $t_L = 63.38$ min.



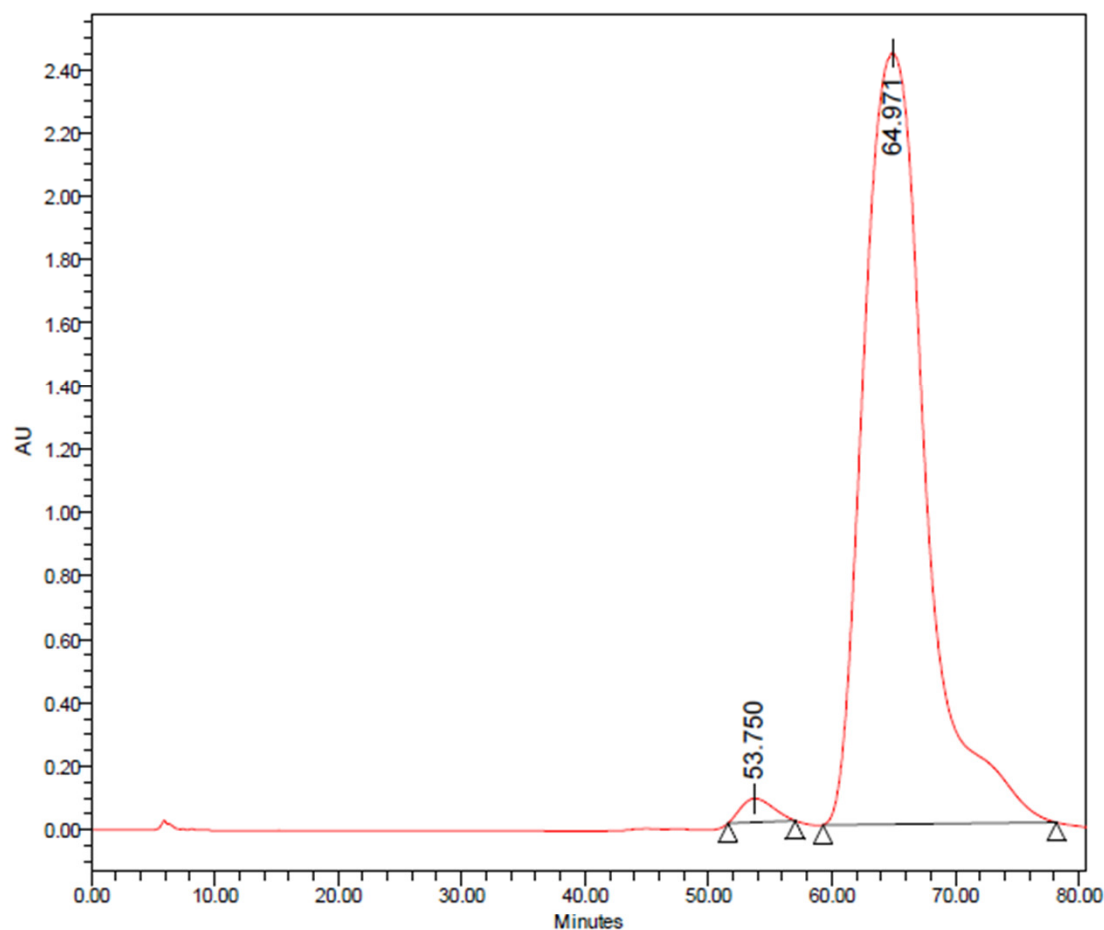
Sample Name: sb712 rep hex ipa 8020 ic fr1; Date Acquired: 08-05-2023
18:51:21 IST; Vial: 1; Injection: 2



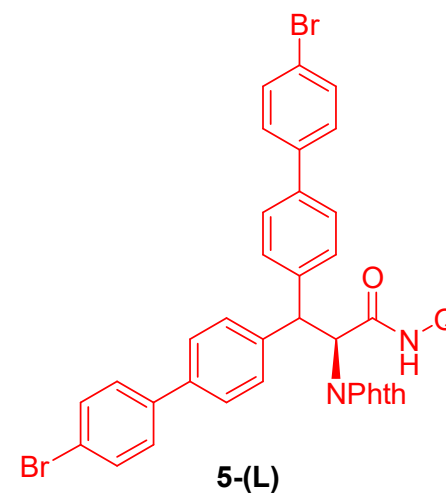
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb712 rep hex ipa 8020 ic fr1	1	2	63.349	2097619	1.08	18984
2	sb712 rep hex ipa 8020 ic fr1	1	2	54.087	191550761	98.92	814673
Mean				58.718			
Std. Dev.				6.549			

The enantiomeric ratio ($er = >95:5$) of the compound **5-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 54.08$ min, $t_L = 63.34$ min.



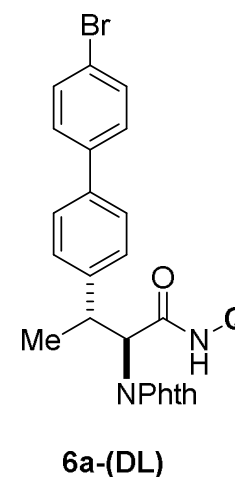
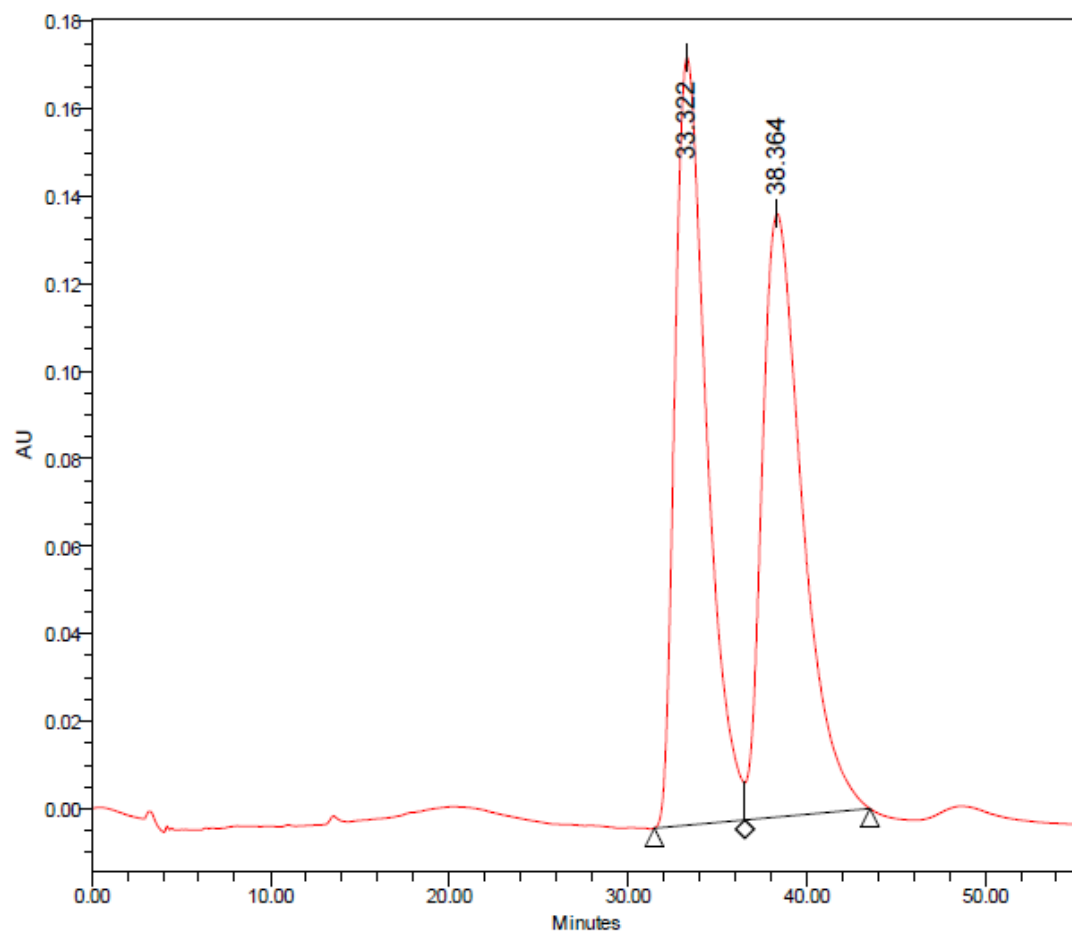
Sample Name: sb1148 rep hex ipa 8020 ic fr1; Date Acquired: 08-05-2023
17:30:24 IST; Vial: 1; Injection: 1



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb1148 rep hex ipa 8020 ic fr1	1	1	64.971	846189135	98.42	2434115
2	sb1148 rep hex ipa 8020 ic fr1	1	1	53.750	13576241	1.58	75048
Mean				59.361			
Std. Dev.				7.935			

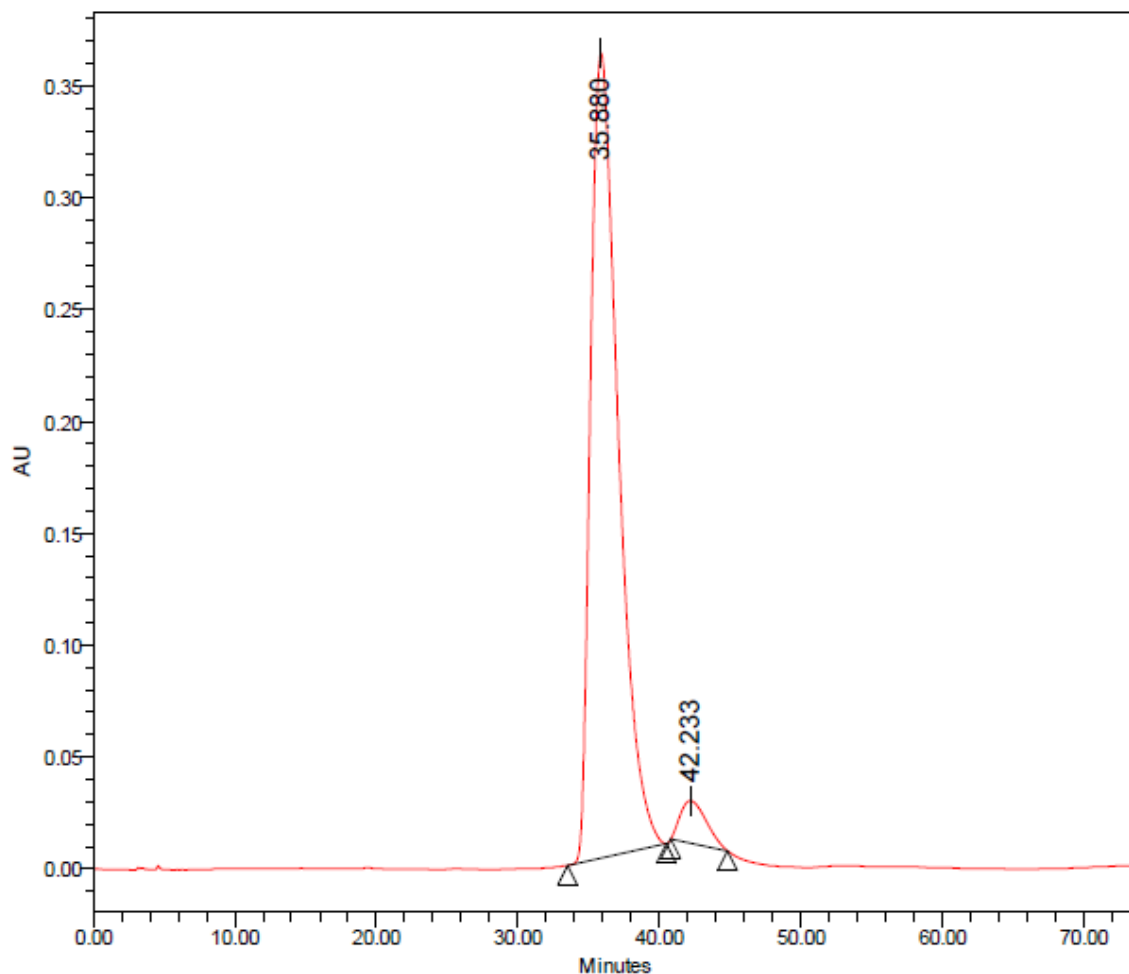
The enantiomeric ratio ($er = 98:2$) of the compound **5-(L)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 53.75$ min, $t_L = 64.97$ min.



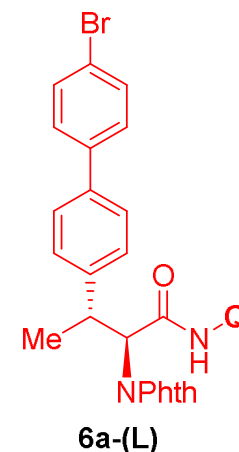
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 957 HEX IPA 9010 ODH FR1	1	2	33.322	21712411	50.08	175503
2	SB 957 HEX IPA 9010 ODH FR1	1	2	38.364	21645126	49.92	137906
Mean				35.843			
Std. Dev.				3.565			

The HPLC of the compound **6a-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 33.32$ min, $t_D = 38.36$ min.



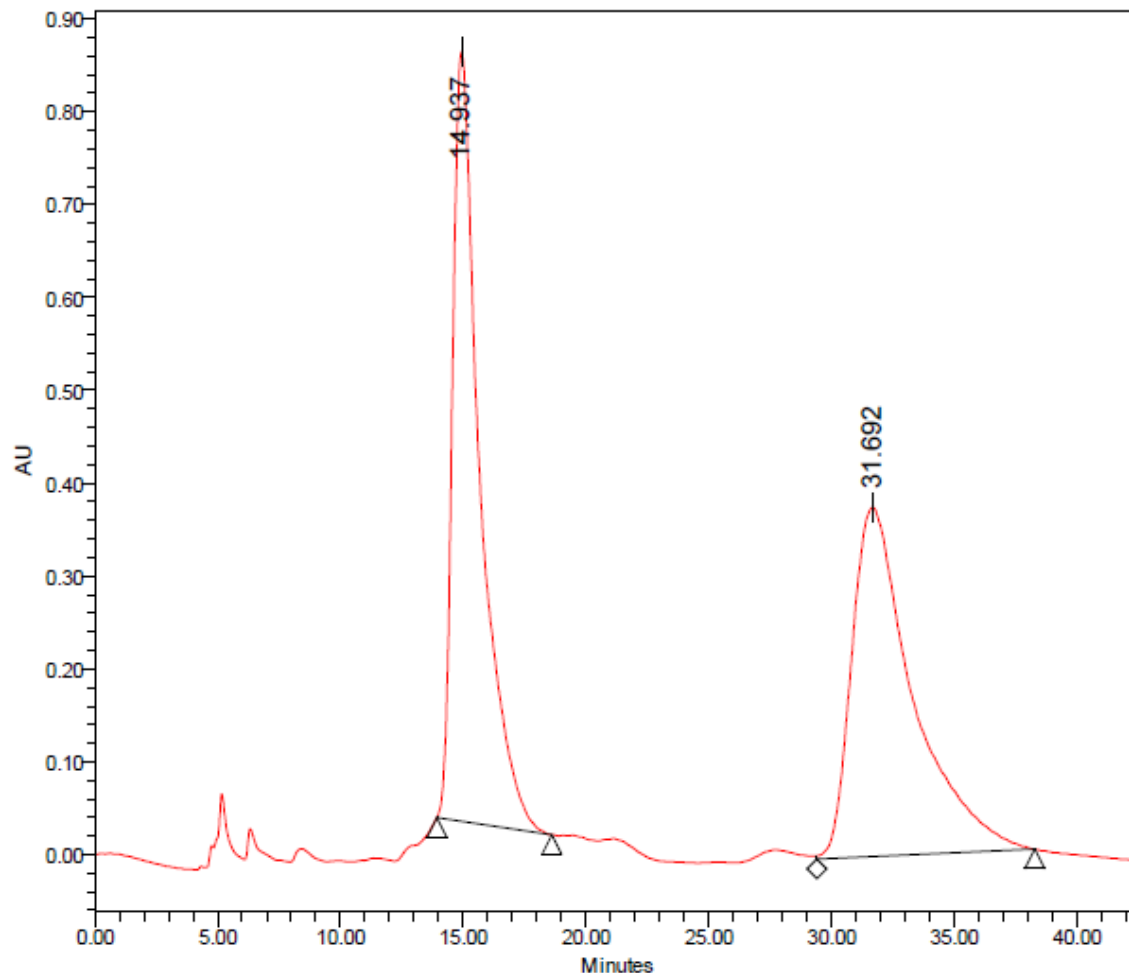
Sample Name: SB 1808 HEX IPA 9010 ODH FR1; Date Acquired: 27-06-2024
12:19:05 IST; Vial: 1; Injection: 4



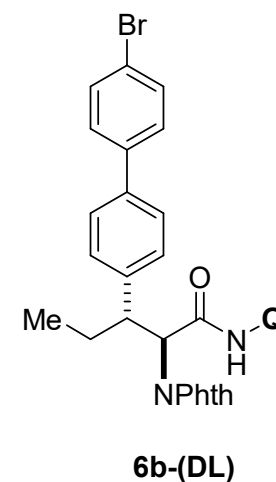
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 1808 HEX IPA 9010 ODH FR1	1	4	42.233	2434769	4.72	18994
2	SB 1808 HEX IPA 9010 ODH FR1	1	4	35.880	49140406	95.28	359923
Mean				39.056			
Std. Dev.				4.492			

The enantiomeric ratio ($er = 95:5$) of the compound **6a-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 35.88$ min, $t_D = 42.23$ min.



Sample Name: sb-122rep2 hexipa5050 ic fr1; Date Acquired: 22-04-2023
20:15:33 IST; Vial: 1; Injection: 7

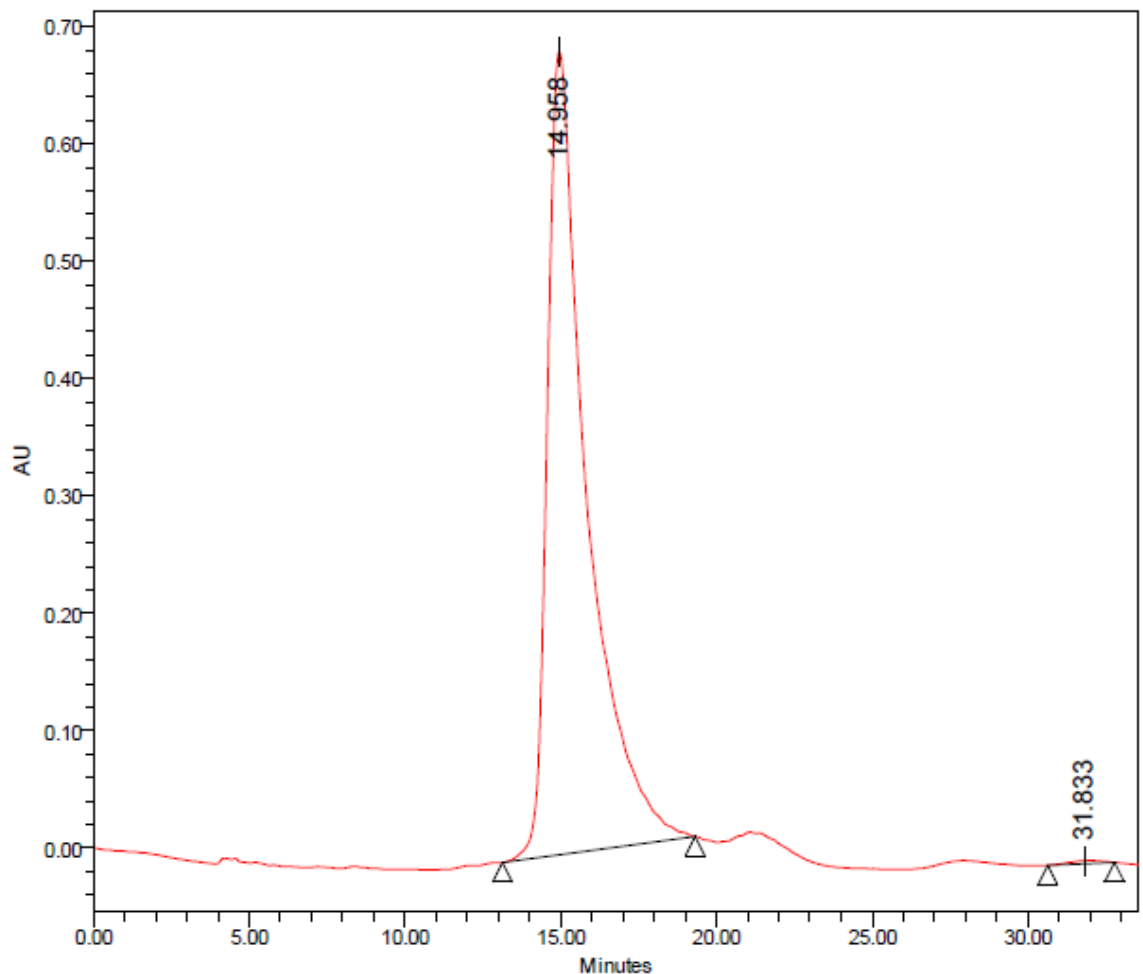


Peak Summary with Statistics

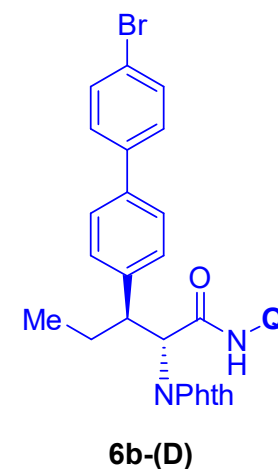
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb-122rep2 hexipa5050 ic fr1	1	7	31.692	64976091	50.26	376099
2	sb-122rep2 hexipa5050 ic fr1	1	7	14.937	64300161	49.74	828705
Mean				23.314			
Std. Dev.				11.847			

The HPLC of the compound **6b-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 14.93$ min, $t_L = 31.69$ min.



Sample Name: sb 687 hex ipa 5050 ic fr1; Date Acquired: 22-04-2023 16:00:28
IST; Vial: 1; Injection: 2

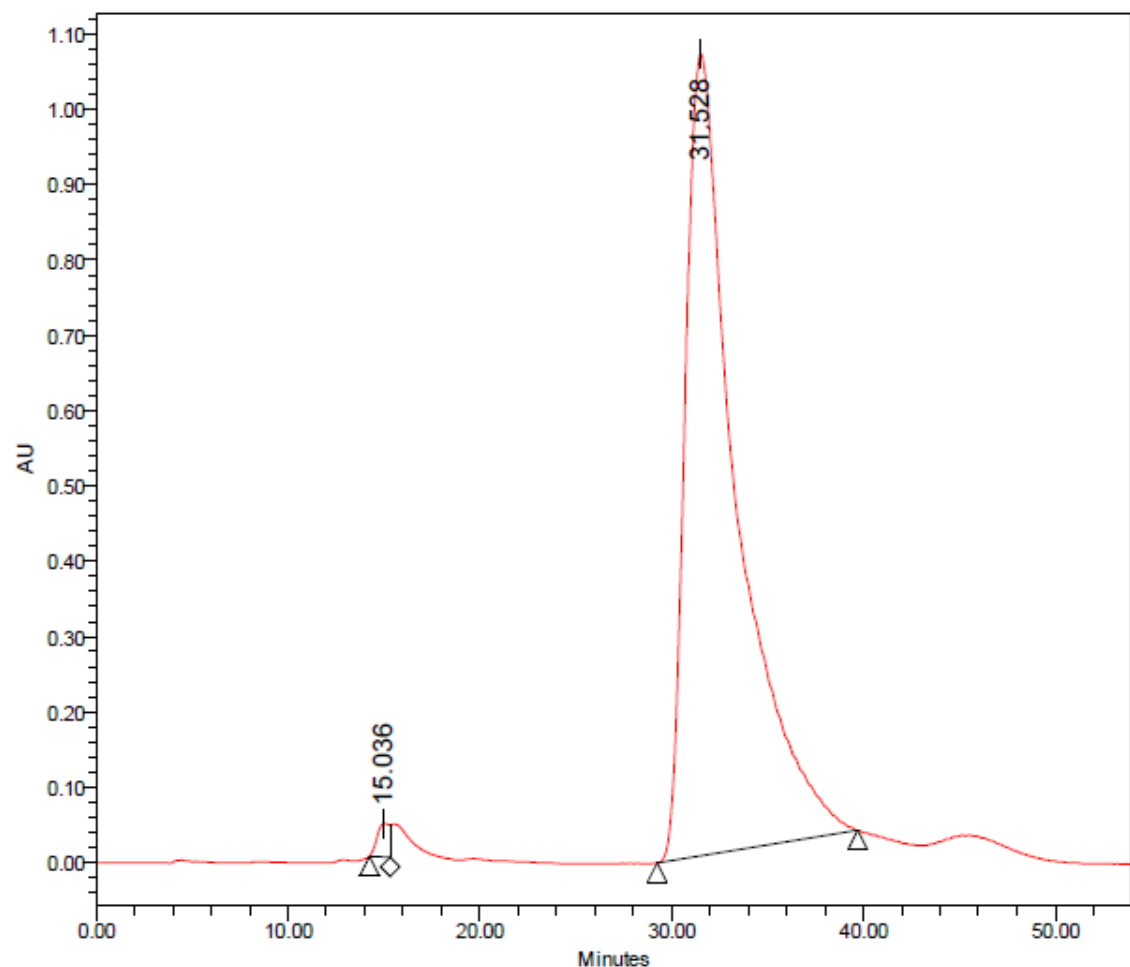


Peak Summary with Statistics

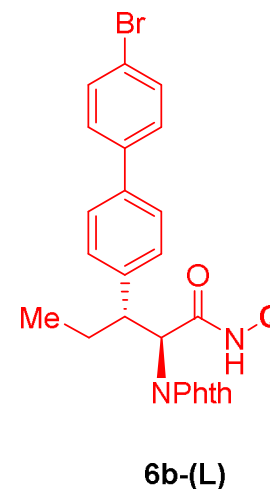
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 687 hex ipa 5050 ic fr1	1	2	31.833	191777	0.32	2536
2	sb 687 hex ipa 5050 ic fr1	1	2	14.958	60396584	99.68	684695
Mean				23.395			
Std. Dev.				11.932			

The enantiomeric ratio (*er* 99:1) of the compound **6b-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 14.95$ min, $t_L = 31.83$ min.



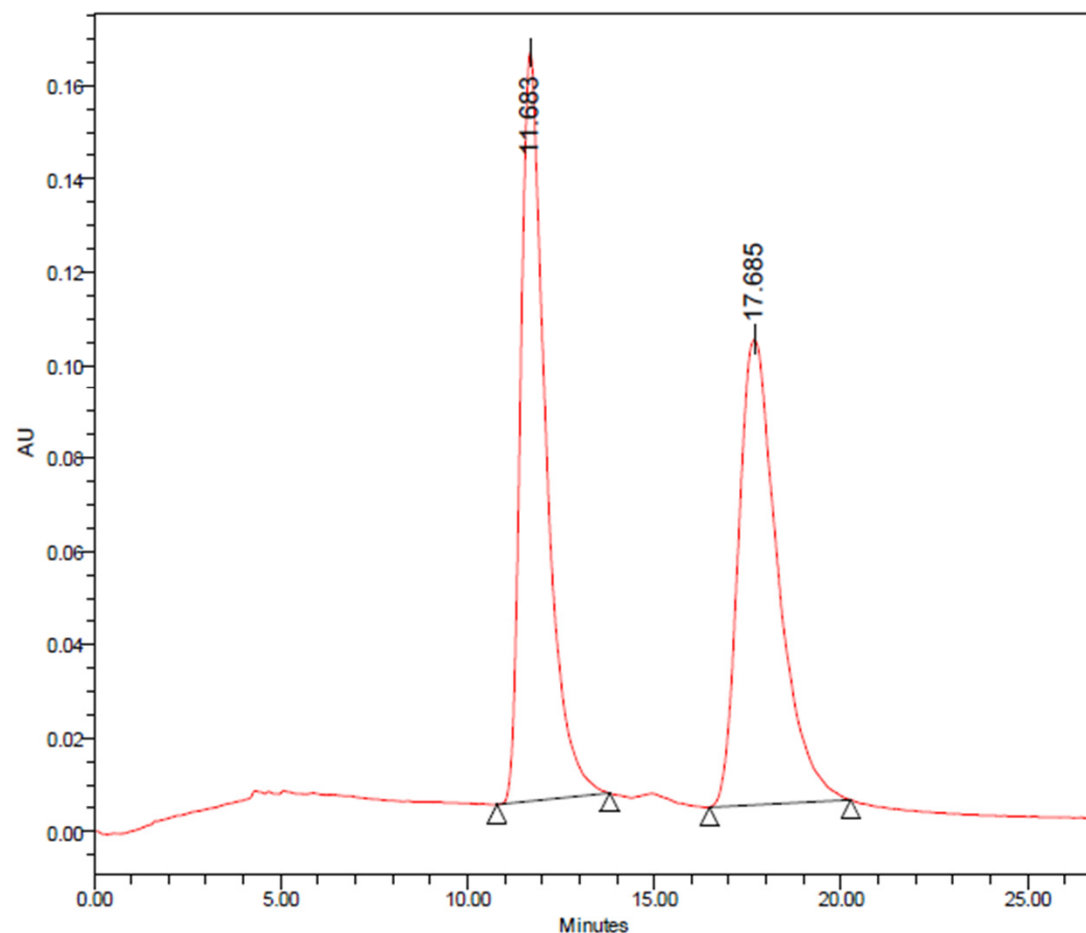
Sample Name: sb-683 hexipa5050 ic fr1; Date Acquired: 22-04-2023 16:37:54
IST; Vial: 1; Injection: 3



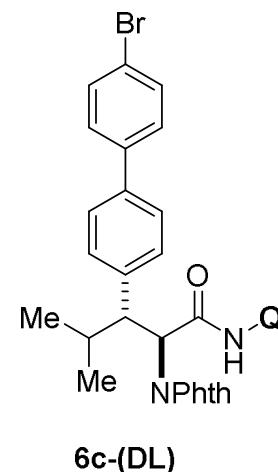
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb-683 hexipa5050 ic fr1	1	3	31.528	197833204	99.03	1064701
2	sb-683 hexipa5050 ic fr1	1	3	15.036	1942837	0.97	44513
Mean				23.282			
Std. Dev.				11.661			

The enantiomeric ratio ($er = >98:2$) of the compound **6b-(L)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 15.03$ min, $t_L = 31.52$ min.



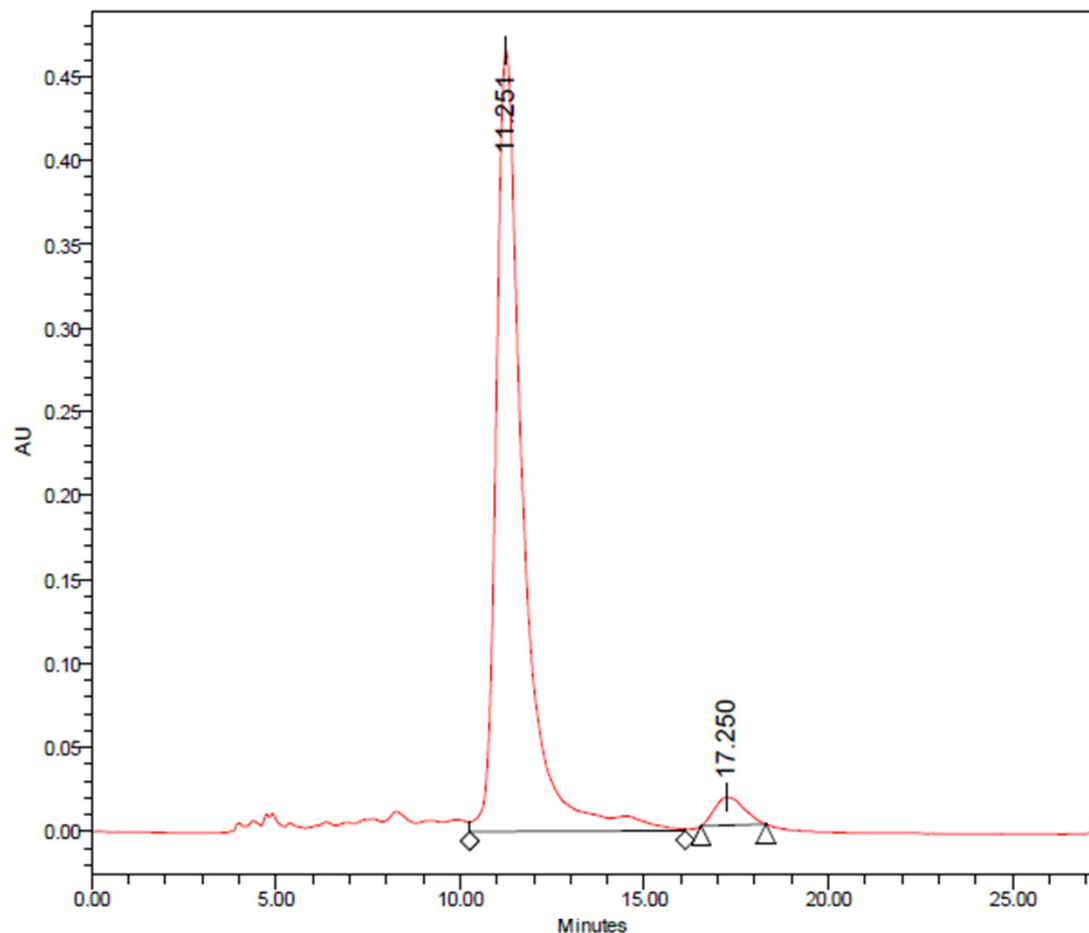
Sample Name: SB176rep4 HEXIPA5050ICFR1; Date Acquired: 19-01-2022
 18:31:18 IST; Vial: 1; Injection: 9



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB176rep4 HEXIPA5050ICFR1	1	9	17.685	7350134	49.44	99804
2	SB176rep4 HEXIPA5050ICFR1	1	9	11.683	7517098	50.56	160600
Mean				14.684			
Std. Dev.				4.244			

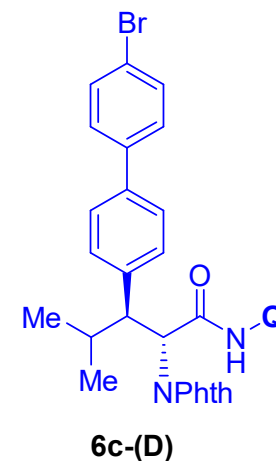
The HPLC of the compound **6c-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 11.68$ min, $t_L = 17.68$ min.



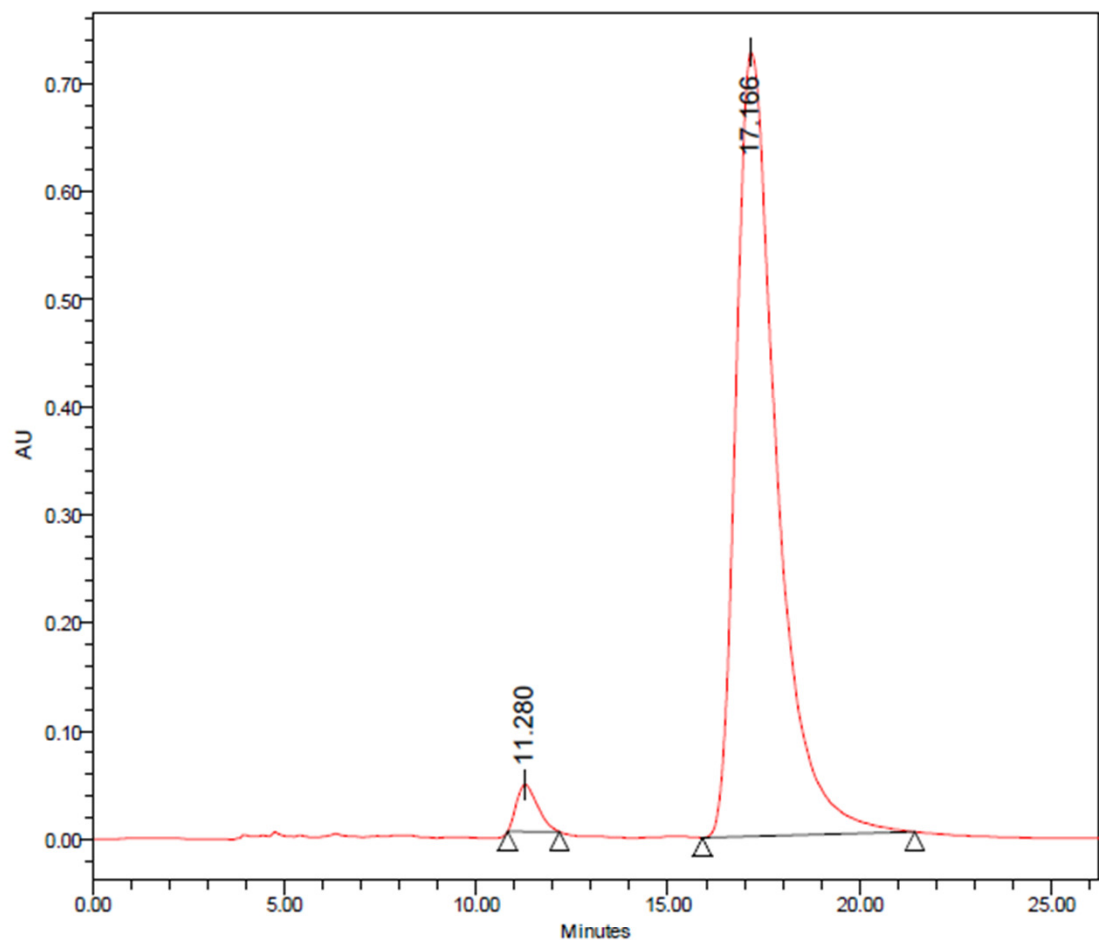
Sample Name: SB696 HEXIPA5050ICFR1; Date Acquired: 19-01-2022 19:26:59
IST; Vial: 1; Injection: 11

Peak Summary with Statistics
Name:

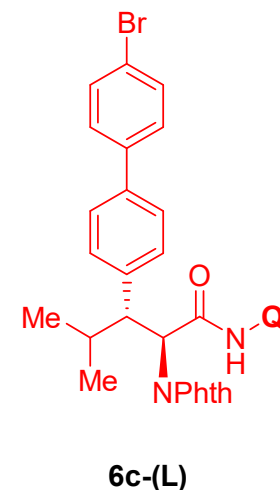
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB696 HEXIPA5050ICFR1	1	11	17.250	920366	3.74	16568
2	SB696 HEXIPA5050ICFR1	1	11	11.251	23677327	96.26	465651
Mean				14.251			
Std. Dev.				4.242			



The enantiomeric ratio ($er = 96:4$) of the compound **6c-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 11.25$ min, $t_L = 17.25$ min.



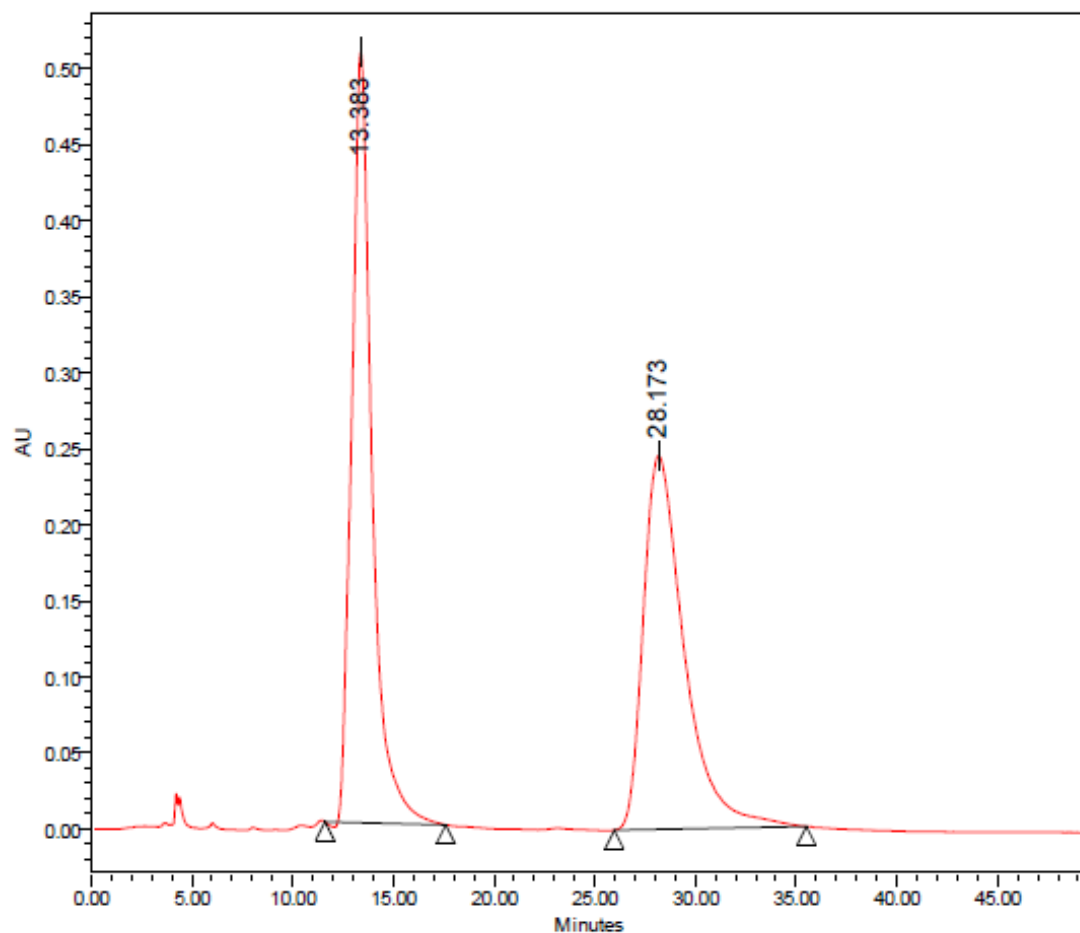
Sample Name: SB705 HEXIPA5050ICFR1; Date Acquired: 19-01-2022 18:58:23
 IST; Vial: 1; Injection: 10



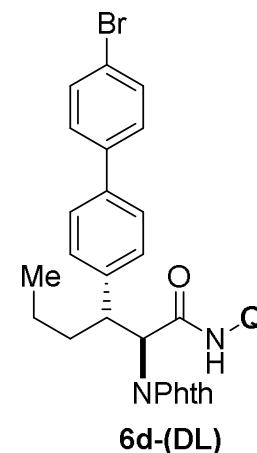
Peak Summary with Statistics
 Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB705 HEXIPA5050ICFR1	1	10	17.166	53734402	97.02	726560
2	SB705 HEXIPA5050ICFR1	1	10	11.280	1649577	2.98	43374
Mean				14.223			
Std. Dev.				4.162			

The enantiomeric ratio ($er = 97:3$) of the compound **6c-(L)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 11.28$ min, $t_L = 17.16$ min.



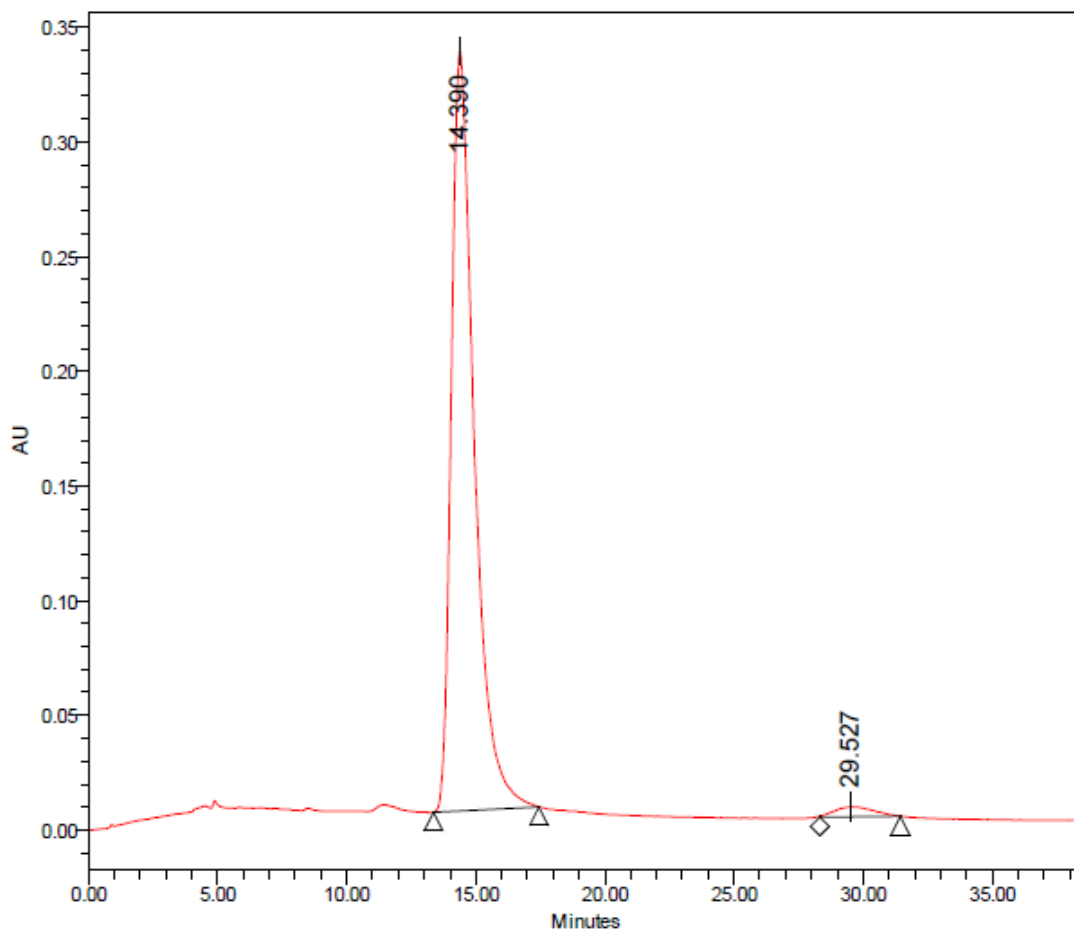
Sample Name: SB123 HEXIPA5050ICFR1; Date Acquired: 19-01-2022 09:01:07
IST; Vial: 1; Injection: 1



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB123 HEXIPA5050ICFR1	1	1	28.173	34708078	49.44	245466
2	SB123 HEXIPA5050ICFR1	1	1	13.383	35492307	50.56	506458
Mean				20.778			
Std. Dev.				10.459			

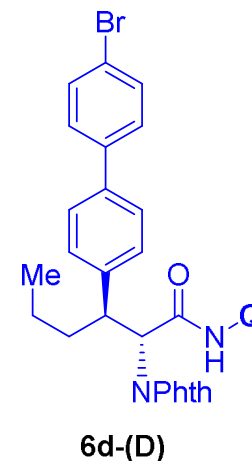
The HPLC of the compound **6d-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 13.38$ min, $t_L = 28.17$ min.



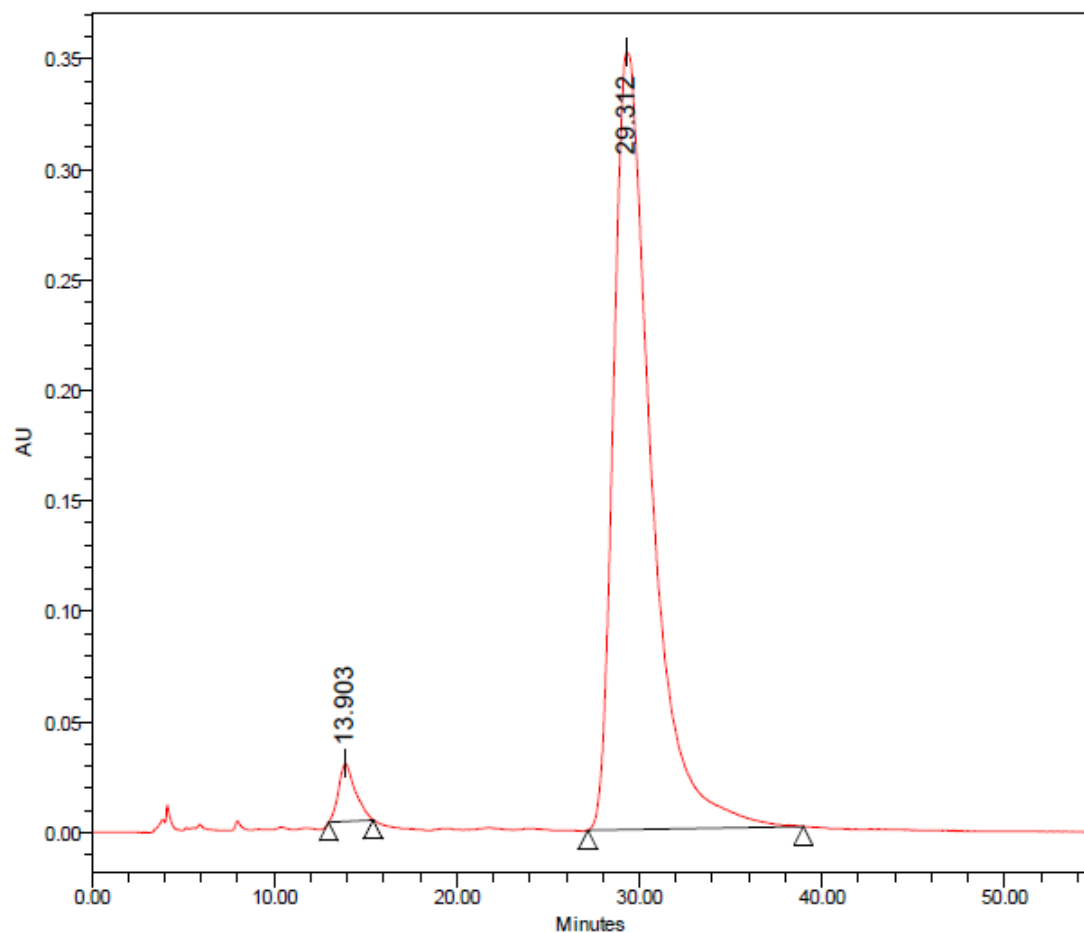
Sample Name: SB711 rep HEXIPA5050ICFR1; Date Acquired: 19-01-2022
 11:53:18 IST; Vial: 1; Injection: 4

Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB711 rep HEXIPA5050ICFR1	1	4	29.527	451397	2.16	4337
2	SB711 rep HEXIPA5050ICFR1	1	4	14.390	20399211	97.84	331256
Mean				21.959			
Std. Dev.				10.703			



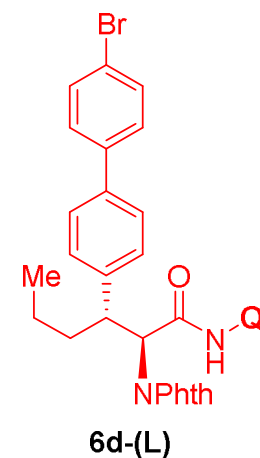
The enantiomeric ratio ($er = 98:2$) of the compound **6d-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 14.39$ min, $t_L = 29.52$ min.



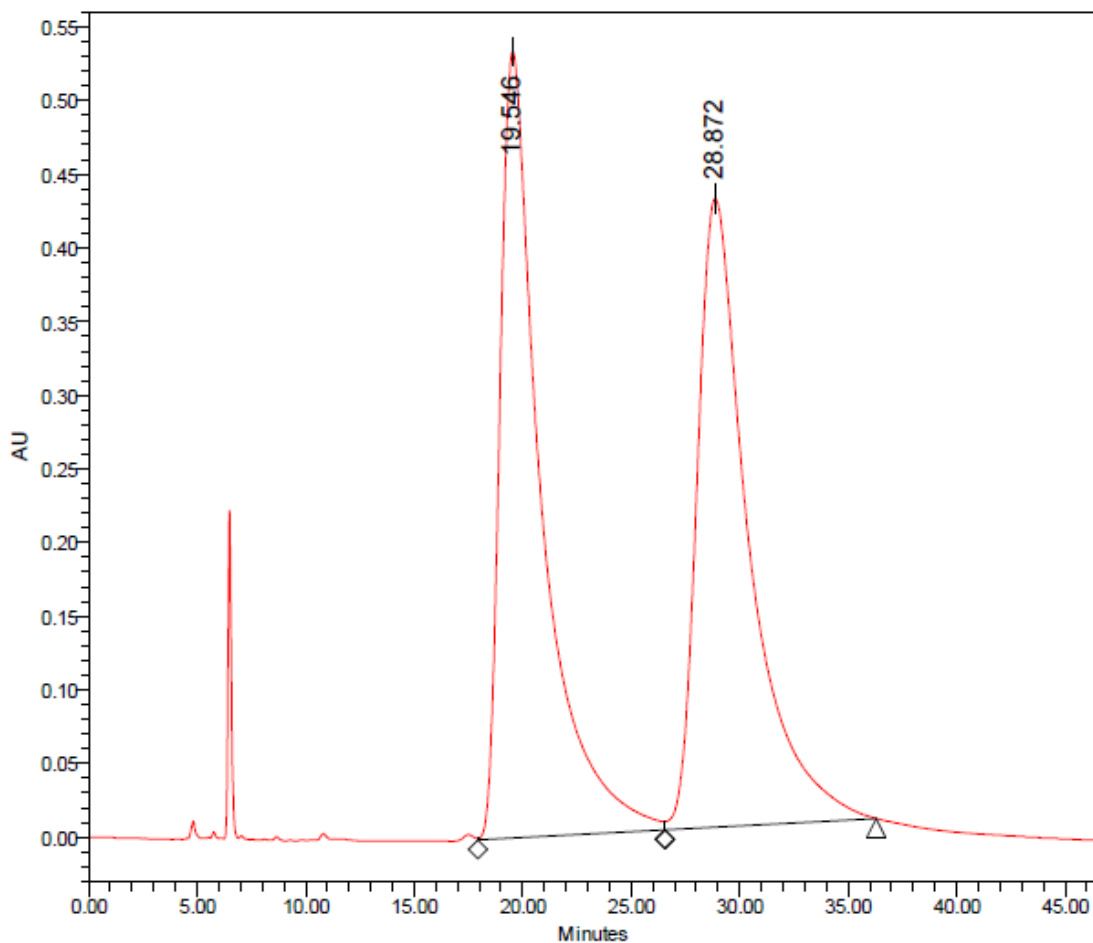
Sample Name: SB706 rep HEXIPA5050ICFR1; Date Acquired: 19-01-2022
09:51:10 IST; Vial: 1; Injection: 2

Peak Summary with Statistics
Name:

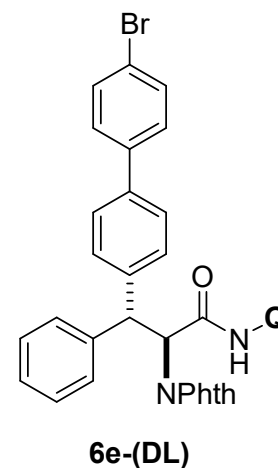
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB706 rep HEXIPA5050ICFR1	1	2	29.312	50415155	96.80	351902
2	SB706 rep HEXIPA5050ICFR1	1	2	13.903	1667122	3.20	26179
Mean				21.607			
Std. Dev.				10.895			



The enantiomeric ratio ($er = 97:3$) of the compound **6d-(L)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 13.90$ min, $t_L = 29.31$ min.



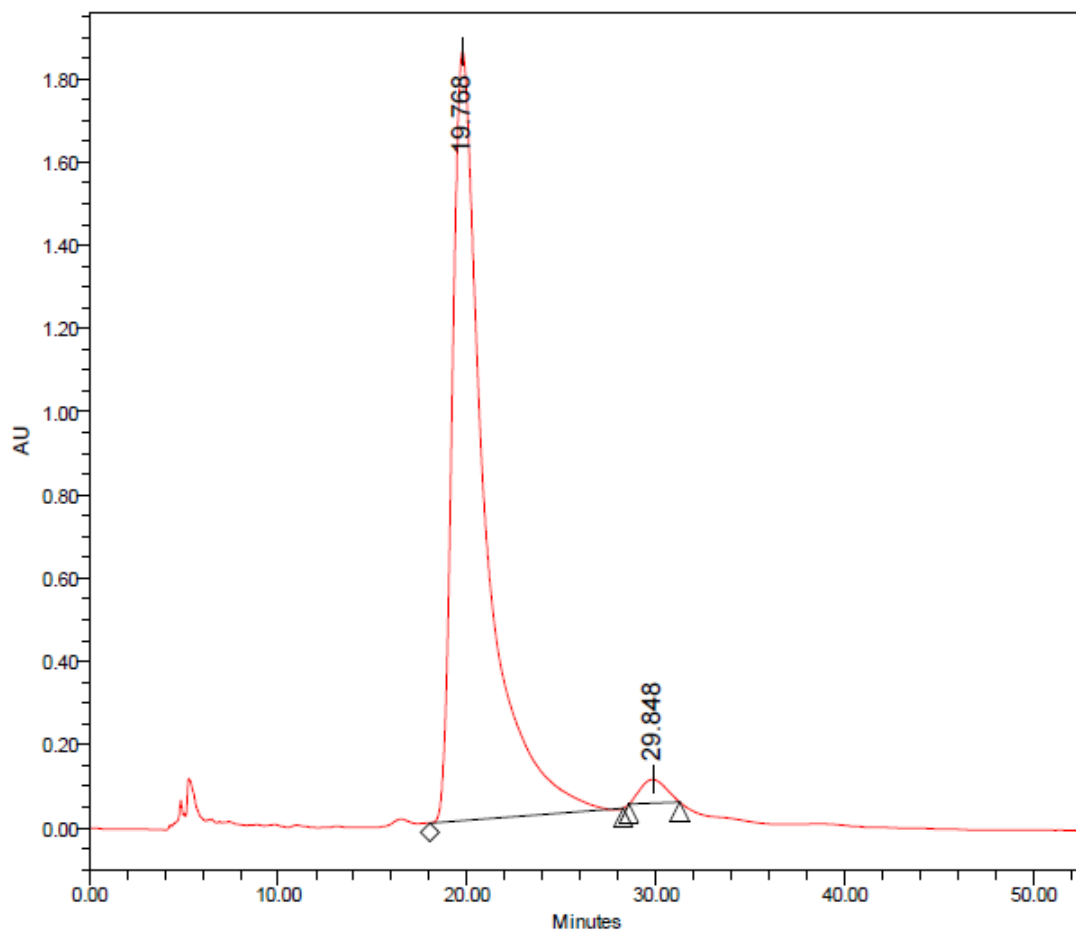
Sample Name: sb 115rep hexpa 4060 newic fr1; Date Acquired: 28-07-2022
12:52:42 IST; Vial: 1; Injection: 2



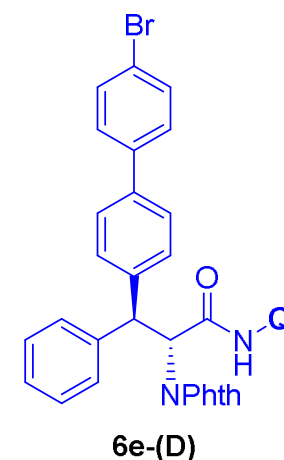
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 115rep hexpa 4060 newic fr1	1	2	28.872	70537622	50.00	426939
2	sb 115rep hexpa 4060 newic fr1	1	2	19.546	70543749	50.00	534100
Mean				24.209			
Std. Dev.				6.594			

The HPLC of the compound **6e-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (40:60), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 19.54$ min, $t_L = 28.87$ min.



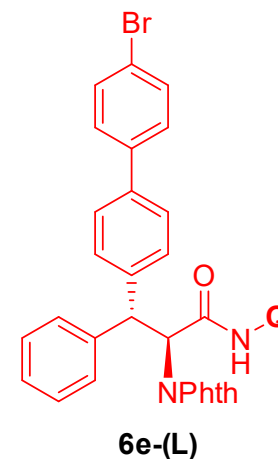
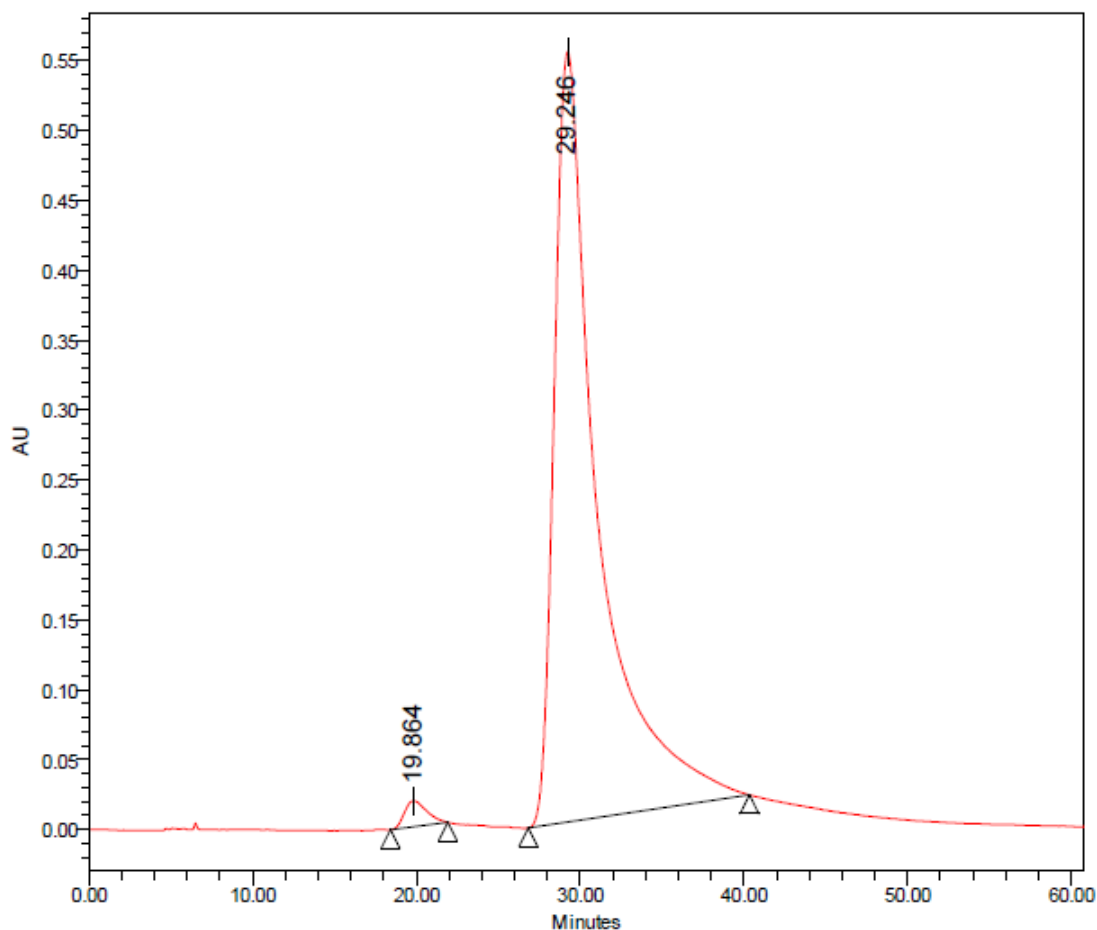
Sample Name: sb688 rep hexpa 4060 newic fr1; Date Acquired: 28-07-2022
15:38:40 IST; Vial: 1; Injection: 5



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb688 rep hexpa 4060 newic fr1	1	5	29.848	5285665	2.34	56464
2	sb688 rep hexpa 4060 newic fr1	1	5	19.768	220752396	97.66	1848091
Mean				24.808			
Std. Dev.				7.127			

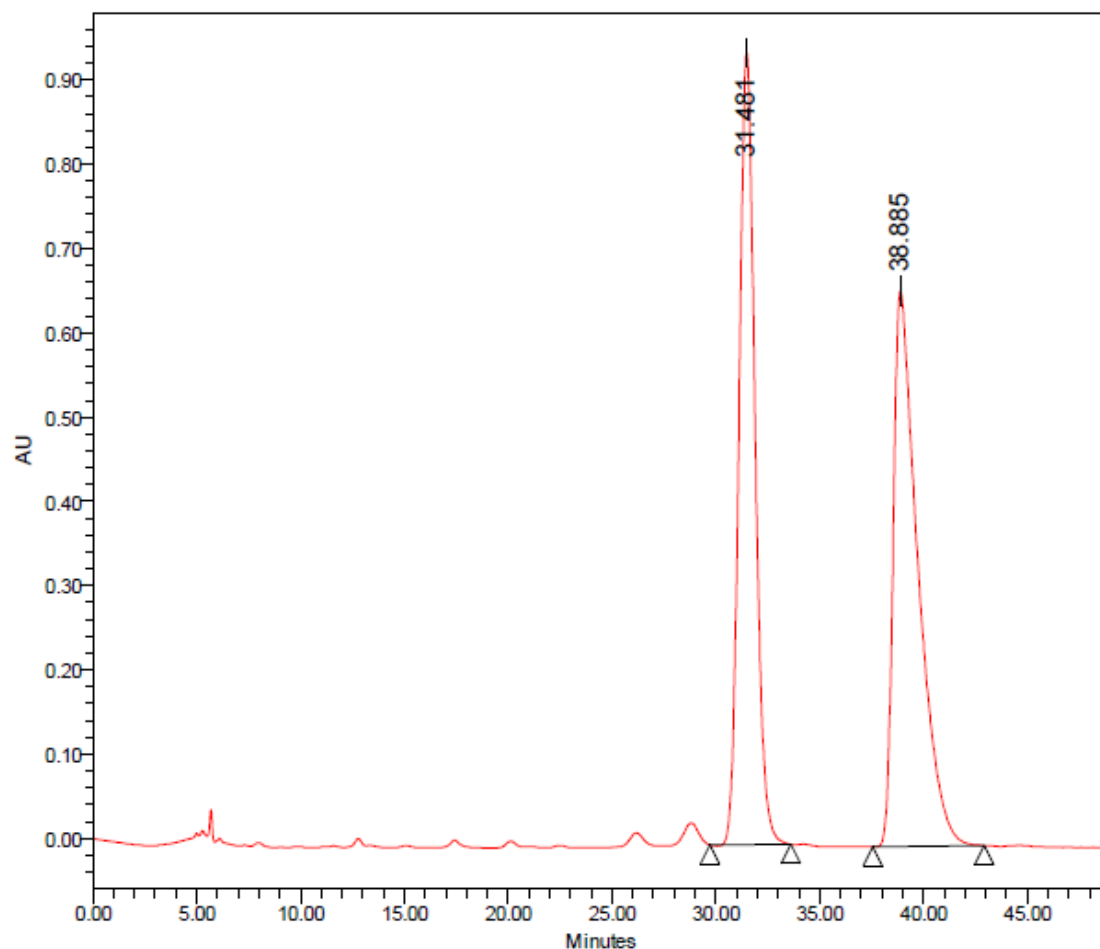
The enantiomeric ratio ($er = 97:3$) of the compound **6e-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (40:60), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 19.76$ min, $t_L = 29.84$ min.



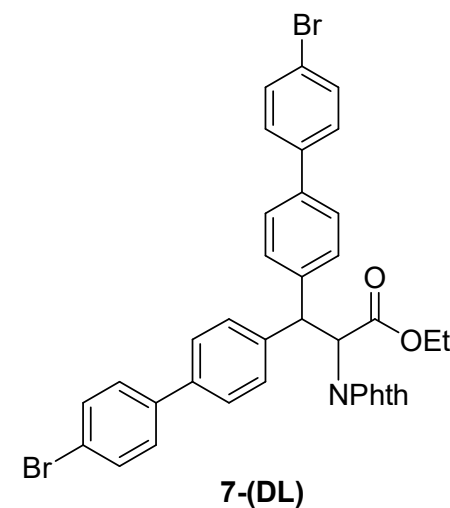
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 444 hexpa 4060 newic fr1	1	3	29.246	10248611	98.31	550853
2	sb 444 hexpa 4060 newic fr1	1	3	19.864	1756688	1.69	18569
Mean				24.555			
Std. Dev.				6.634			

The enantiomeric ratio ($er = 98:2$) of the compound **6e-(L)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (40:60), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 19.86$ min, $t_L = 29.24$ min.



Sample Name: sb 272 r1 hex ipa 8020IA FR=1 ; Date Acquired: 29-05-2023
13:04:56 IST; Vial: 1; Injection: 4

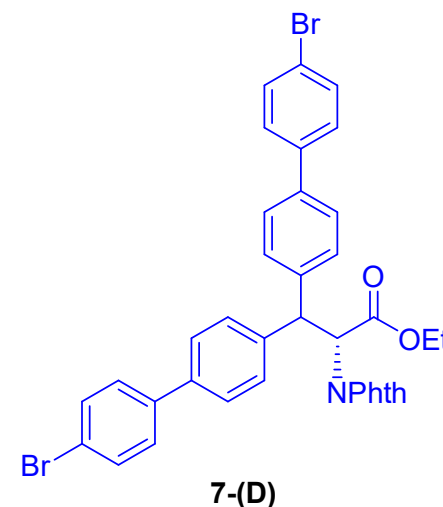
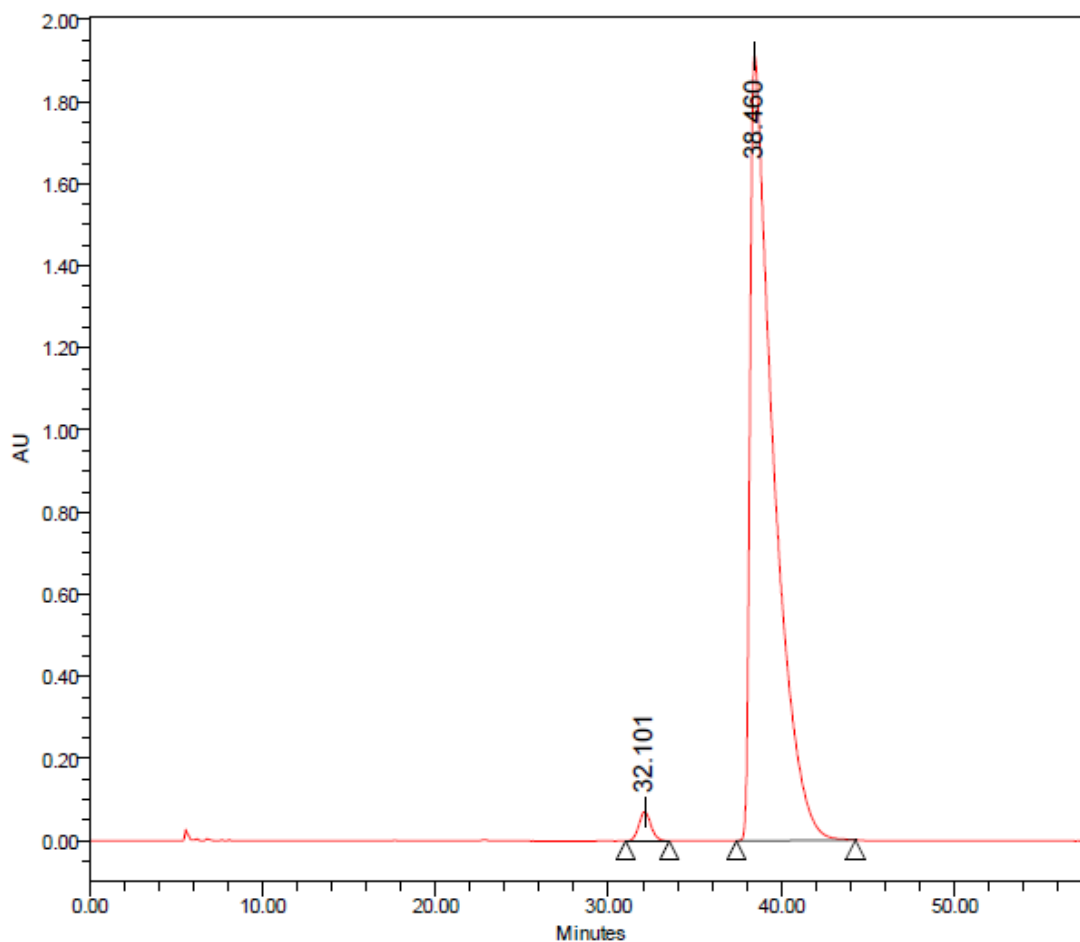


Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 272 r1 hex ipa 8020IA FR=1	1	4	38.885	54363018	51.93	659043
2	sb 272 r1 hex ipa 8020IA FR=1	1	4	31.481	50320495	48.07	939634
Mean				35.183			
Std. Dev.				5.235			

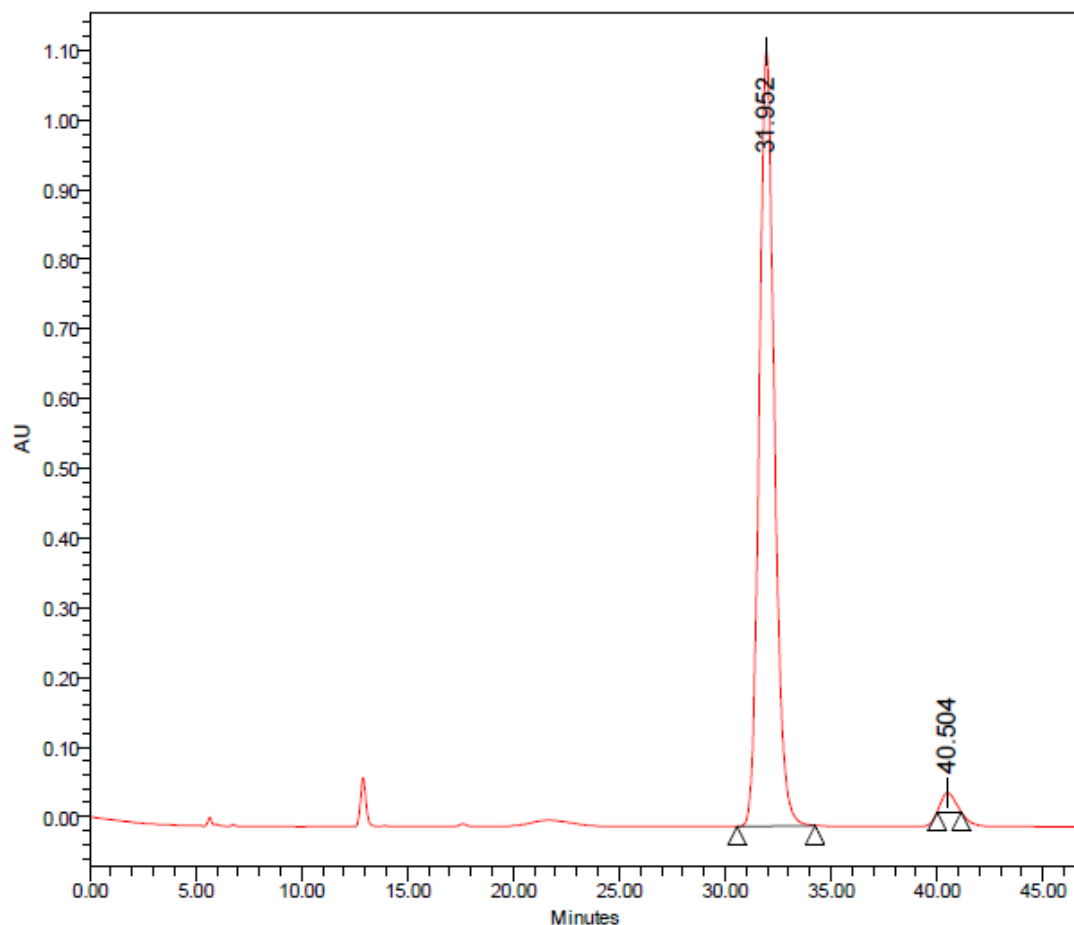
The HPLC of the compound **7-DL** was determined using the Daicel Chiralpak IA column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 31.48$ min, $t_D = 38.88$ min.



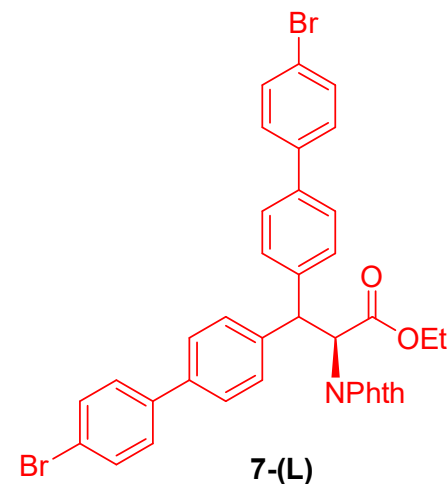
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1049 hex ipa 8020IA FR=1	1	8	38.460	179068326	98.10	1911485
2	sb 1049 hex ipa 8020IA FR=1	1	8	32.101	3473934	1.90	70806
Mean				35.280			
Std. Dev.				4.496			

The enantiomeric ratio ($er = 98:2$) of the compound **7-(D)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 32.10$ min, $t_D = 38.46$ min.



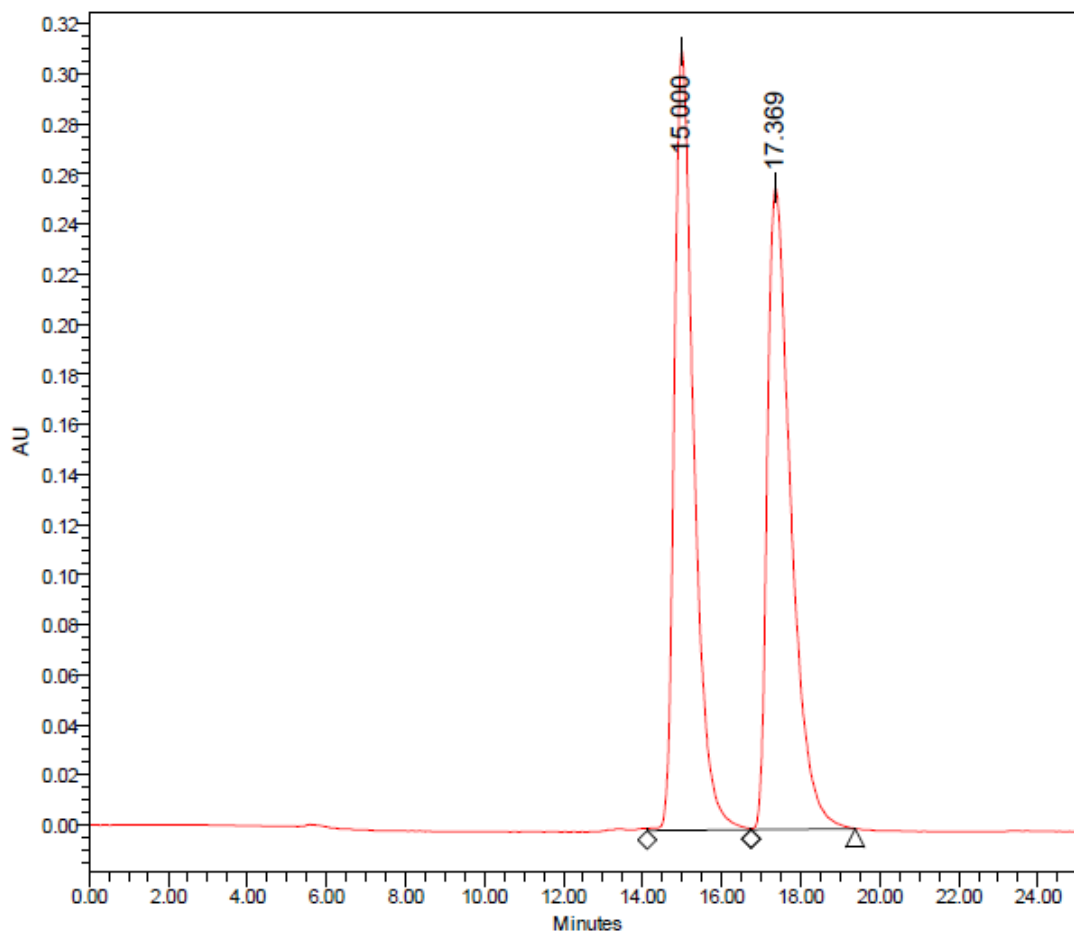
Sample Name: sb 1158rep hex ipa 8020IA FR=1 ; Date Acquired: 29-05-2023
21:01:51 IST; Vial: 1; Injection: 9



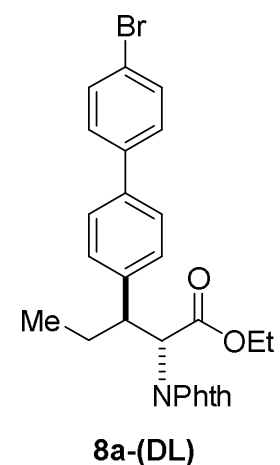
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1158rep hex ipa 8020IA FR=1	1	9	40.504	1136058	2.00	27672
2	sb 1158rep hex ipa 8020IA FR=1	1	9	31.952	55562977	98.00	111190
Mean				36.228			
Std. Dev.				6.047			

The enantiomeric ratio ($er = 98:2$) of the compound **7-(L)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 31.95$ min, $t_D = 40.50$ min.



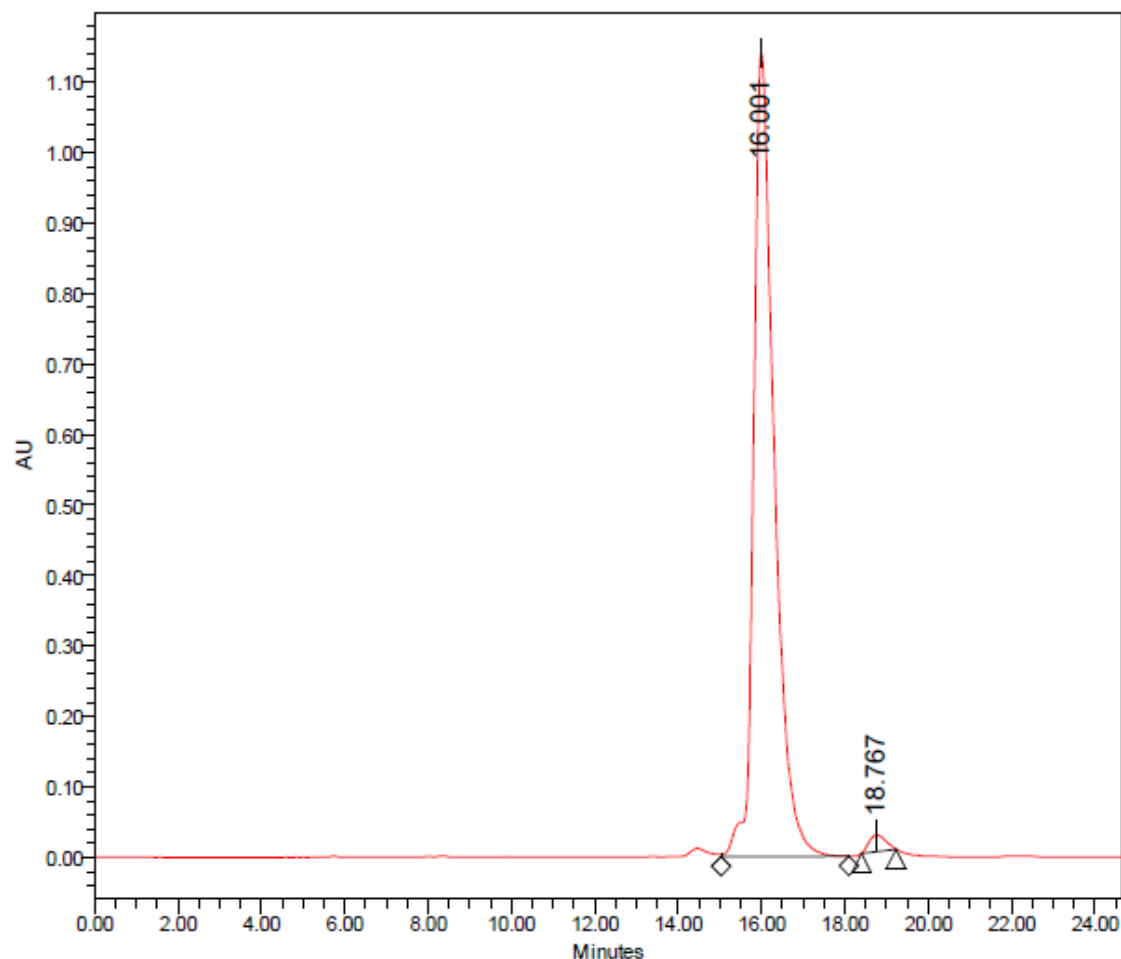
Sample Name: sb 225 hex ipa 9505 odh fr1; Date Acquired: 19-09-2022
10:32:59 IST; Vial: 1; Injection: 3



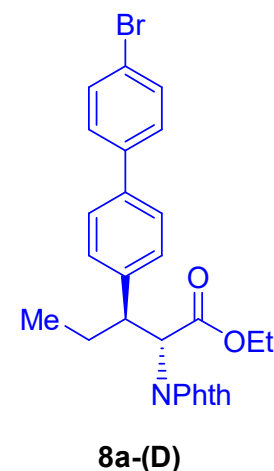
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 225 hex ipa 9505 odh fr1	1	3	17.369	10596888	49.77	256192
2	sb 225 hex ipa 9505 odh fr1	1	3	15.000	10692942	50.23	311111
Mean				16.184			
Std. Dev.				1.675			

The HPLC of the compound **8a-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 15.00$ min, $t_L = 17.36$ min.



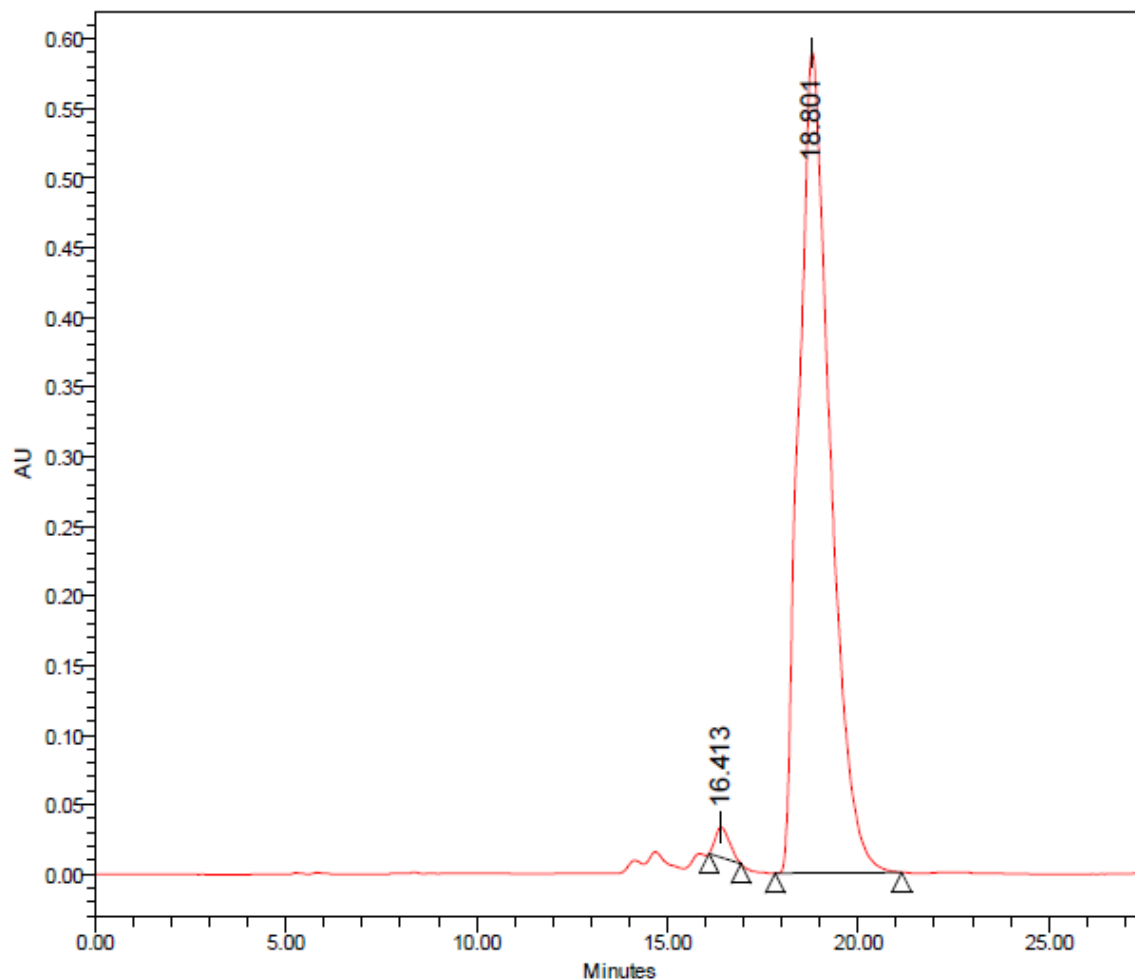
Sample Name: sb 714 hex ipa 9505 odh fr1; Date Acquired: 19-09-2022
 10:59:26 IST; Vial: 1; Injection: 4



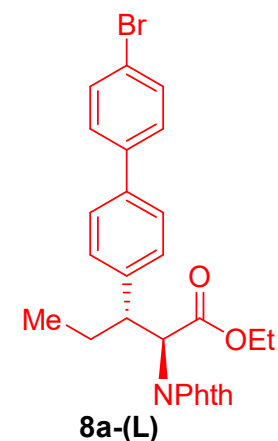
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 714 hex ipa 9505 odh fr1	1	4	18.767	655178	1.65	23643
2	sb 714 hex ipa 9505 odh fr1	1	4	16.001	39146774	98.35	1140424
Mean				17.384			
Std. Dev.				1.956			

The enantiomeric ratio ($er = 98:2$) of the compound **8a-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 16.00$ min, $t_L = 18.76$ min.



Sample Name: sb690 rep hex ipa 9505 odh fr1; Date Acquired: 19-09-2022
11:57:57 IST; Vial: 1; Injection: 6

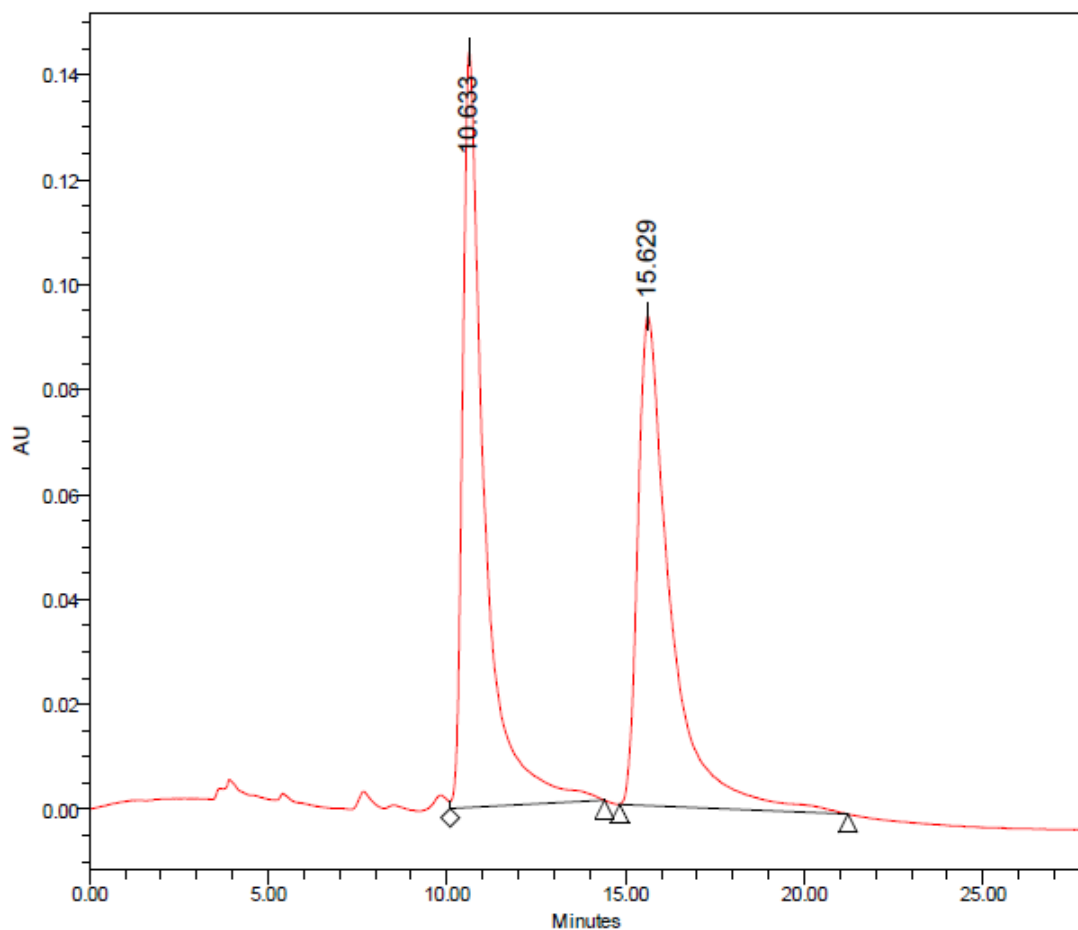


Peak Summary with Statistics

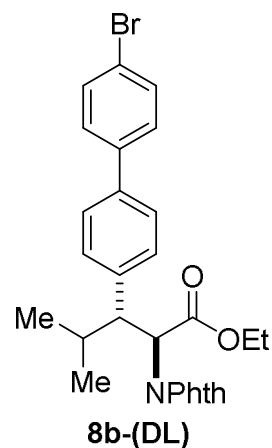
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb690 rep hex ipa 9505 odh fr1	1	6	18.801	33546122	98.37	589049
2	sb690 rep hex ipa 9505 odh fr1	1	6	16.413	555329	1.63	21543
Mean				17.607			
Std. Dev.				1.688			

The enantiomeric ratio ($er = 98:2$) of the compound **8a-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 16.41$ min, $t_I = 18.80$ min.



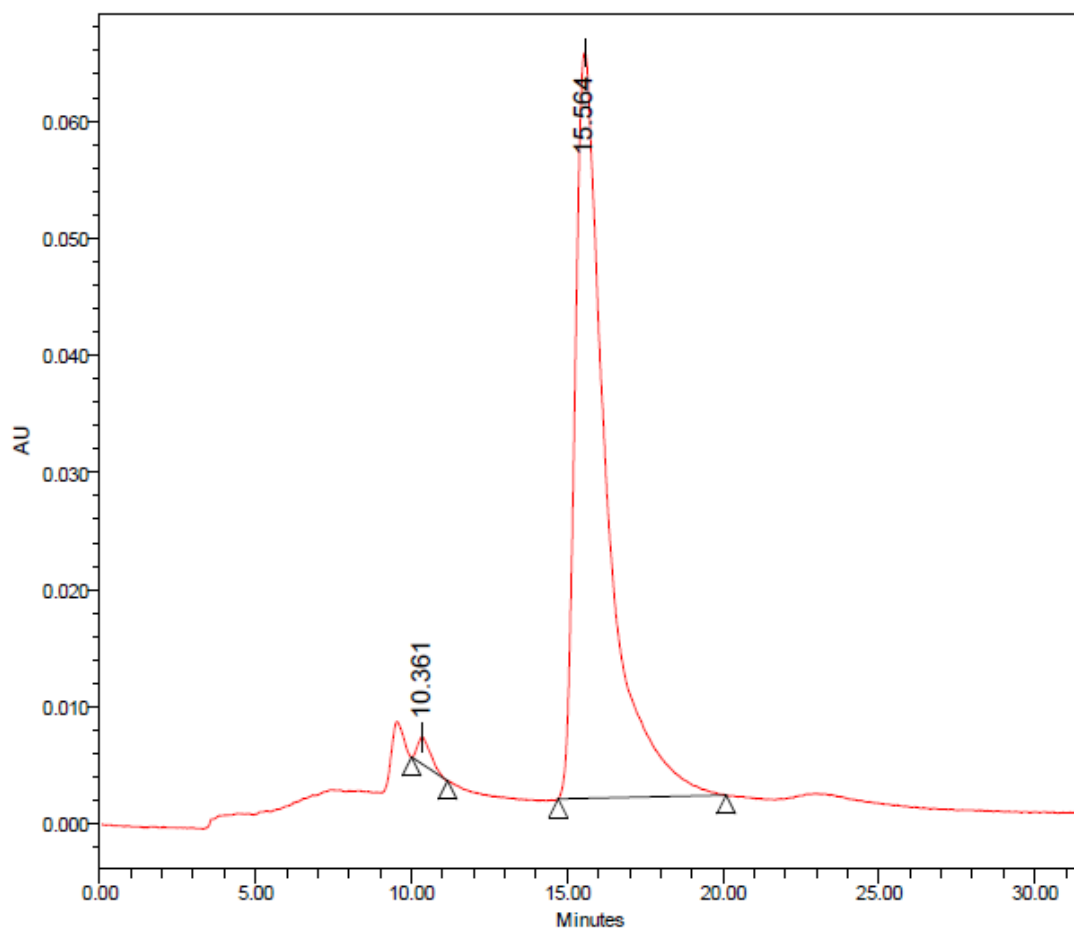
Sample Name: SB-614-REP 2 HEXIPA7030adFR1; Date Acquired: 17-01-2022
16:29:56 IST; Vial: 1; Injection: 9



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB-614-REP 2 HEXIPA7030adFR1	1	9	15.629	5918303	49.05	93333
2	SB-614-REP 2 HEXIPA7030adFR1	1	9	10.633	6147485	50.95	144033
Mean				13.131			
Std. Dev.				3.533			

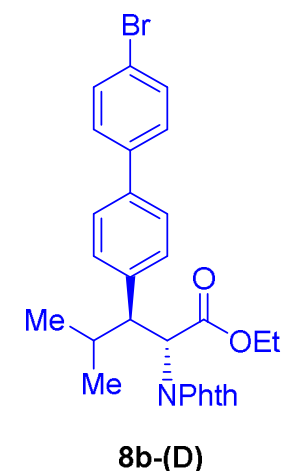
The HPLC of the compound **8b-(DL)** was determined using the Daicel Chiralpak AD column, hexane/*i*-PrOH (70:30), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 10.63$ min, $t_D = 15.62$ min.



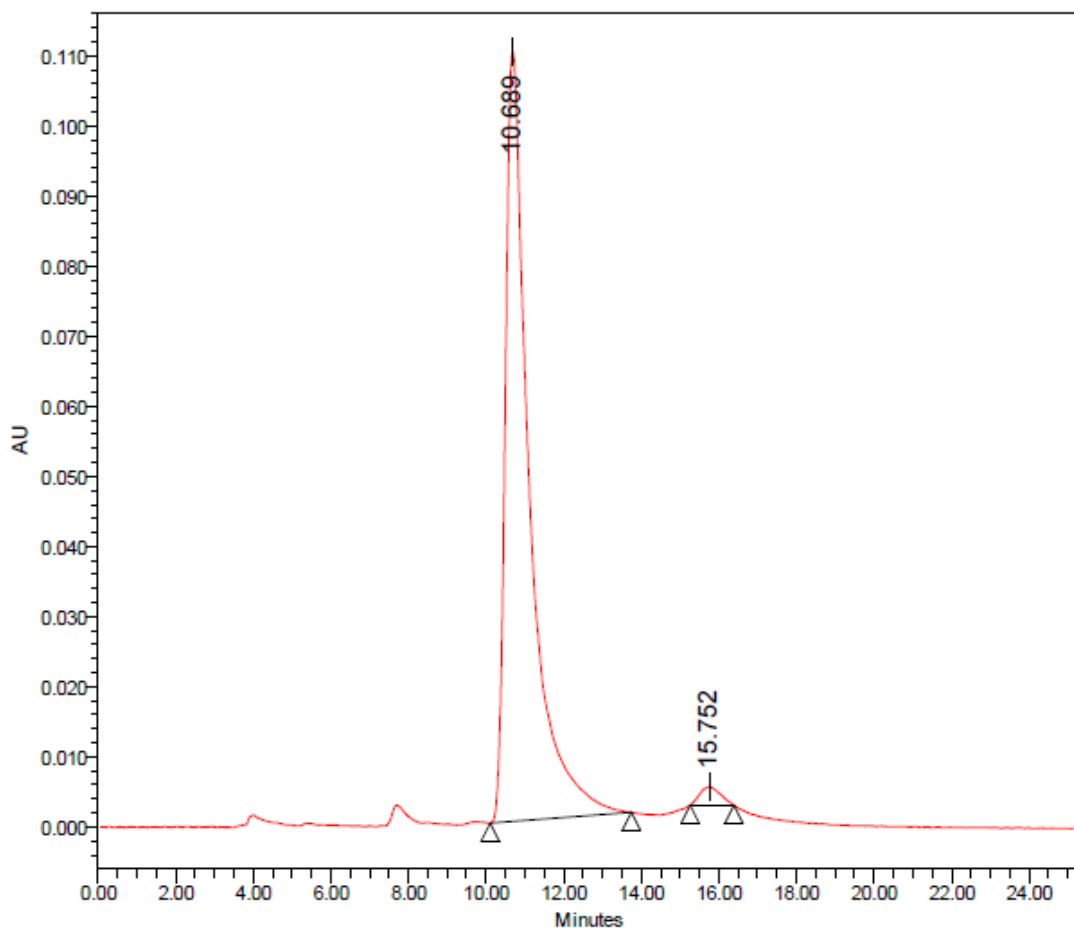
Sample Name: SB-710-HEXIPA7030adFR1; Date Acquired: 17-01-2022 10:43:13
IST; Vial: 1; Injection: 5

Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB-710-HEXIPA7030adFR1	1	5	15.564	4442866	98.50	63659
2	SB-710-HEXIPA7030adFR1	1	5	10.361	67559	1.50	2333
Mean				12.963			
Std. Dev.				3.679			



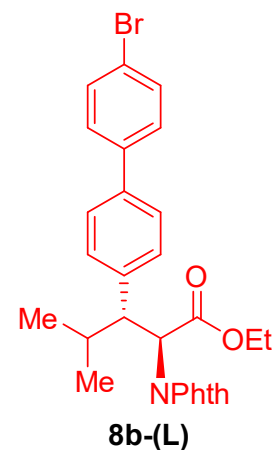
The enantiomeric ratio ($er = >95:5$) of the compound **8b-(D)** was determined by HPLC using the Daicel Chiralpak AD column, hexane/*i*-PrOH (70:30), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 10.36$ min, $t_D = 15.56$ min.



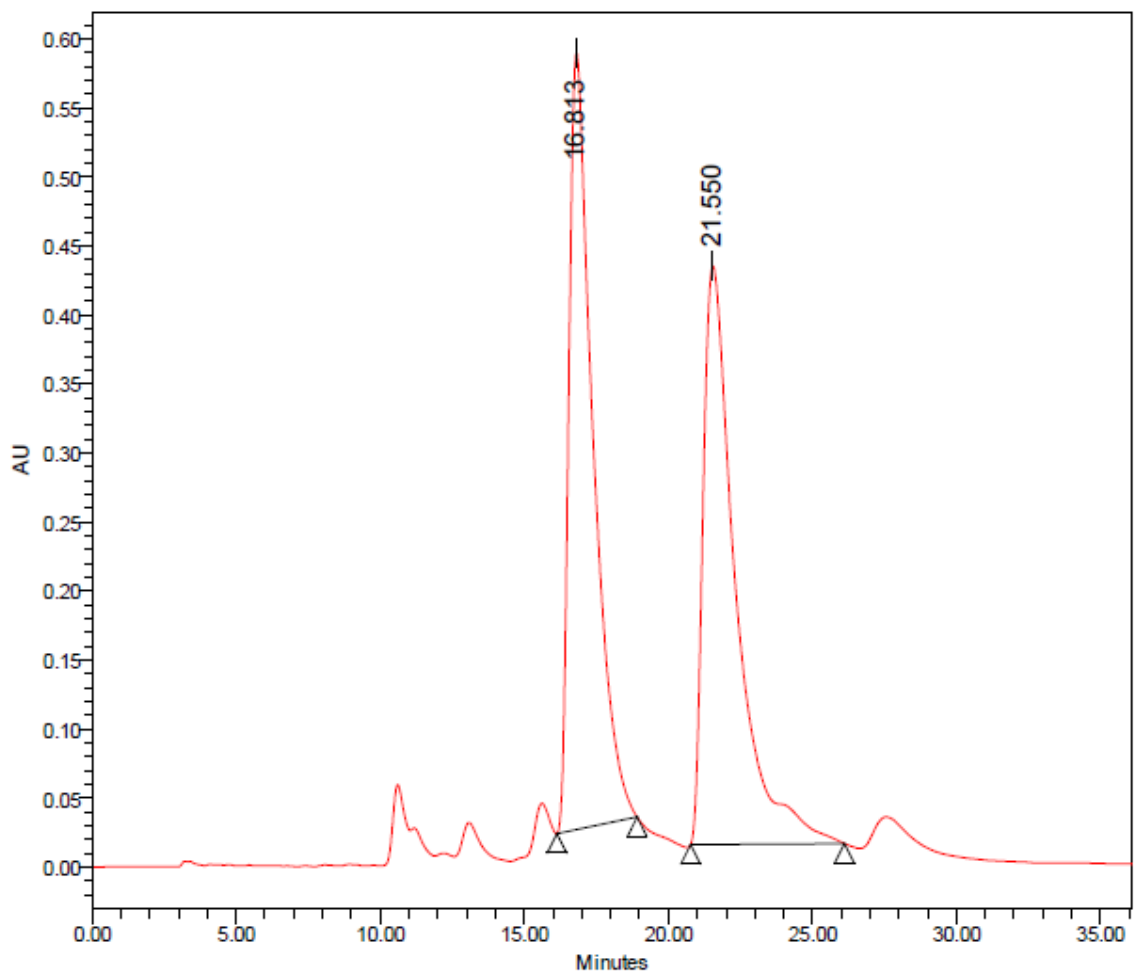
Sample Name: SB-718-REPHEXIPA7030adFR1; Date Acquired: 17-01-2022
12:07:28 IST; Vial: 1; Injection: 7

Peak Summary with Statistics
Name:

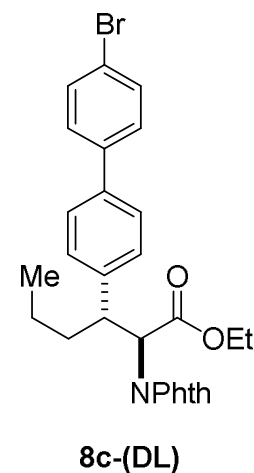
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB-718-REPHEXIPA7030adFR1	1	7	15.752	95904	1.98	2604
2	SB-718-REPHEXIPA7030adFR1	1	7	10.689	4751534	98.02	109831
Mean				13.221			
Std. Dev.				3.581			



The enantiomeric ratio ($er = 98:2$) of the compound **8b-(L)** was determined by HPLC using the Daicel Chiralpak AD column, hexane/*i*-PrOH (70:30), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 10.68$ min, $t_D = 15.75$ min.



Sample Name: sb248 hexipa9010 ad FR=1; Date Acquired: 02-05-2022 13:11:55
IST; Vial: 1; Injection: 1

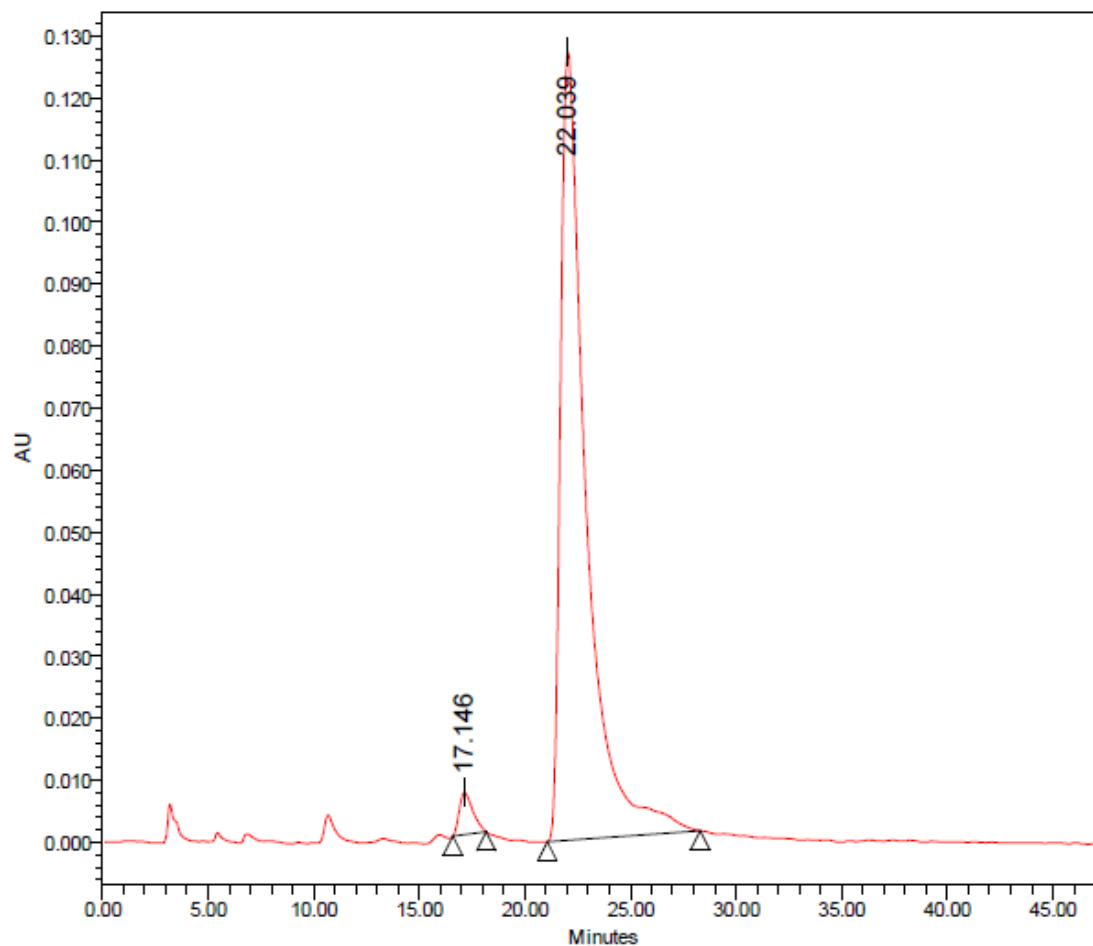


Peak Summary with Statistics

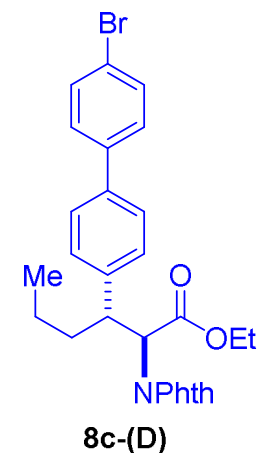
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb248 hexipa9010 ad FR=1	1	1	21.550	32929973	50.20	419039
2	sb248 hexipa9010 ad FR=1	1	1	16.813	32673918	49.80	562723
Mean				19.182			
Std. Dev.				3.350			

The HPLC of the compound **8c-(DL)** was determined using the Daicel Chiralpak AD column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 16.81$ min, $t_D = 21.55$ min.



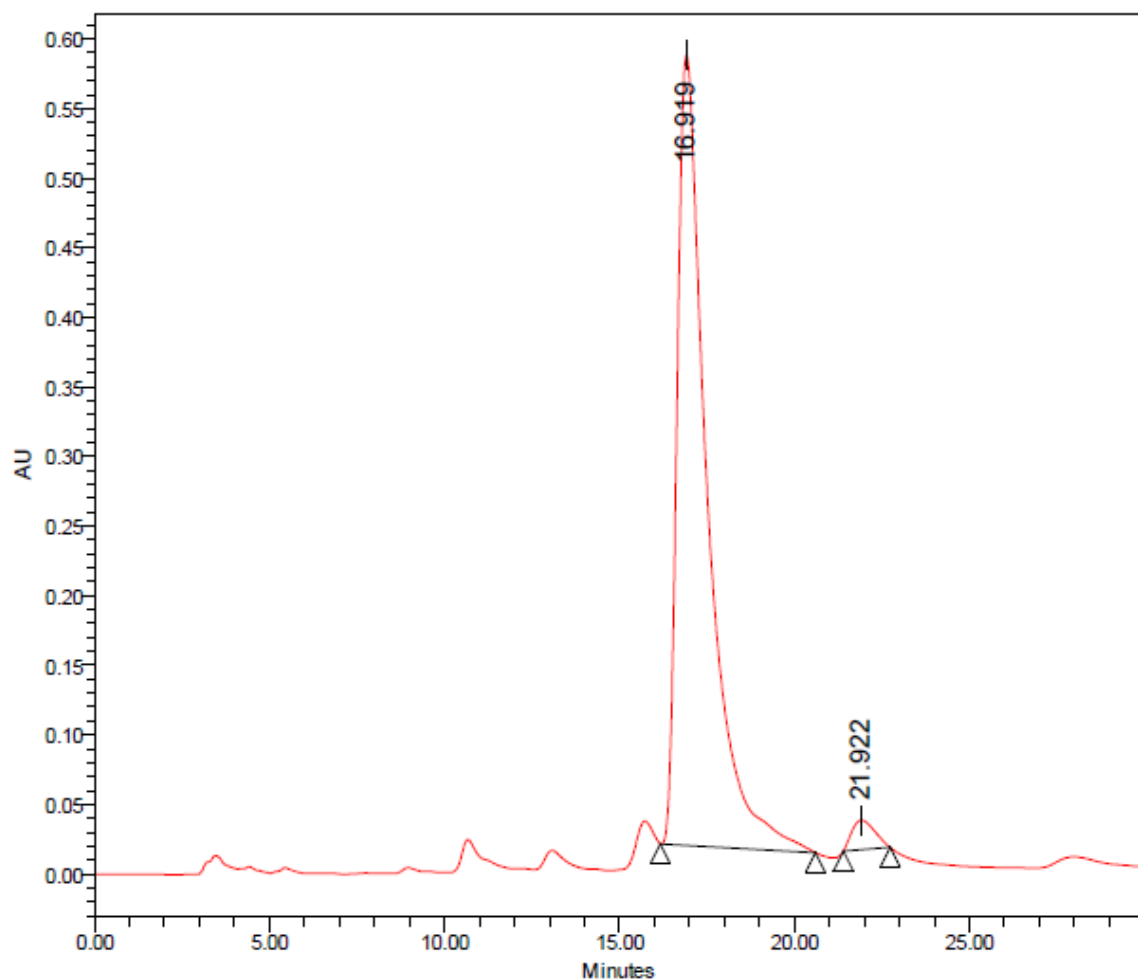
Sample Name: sb740 rephexipa9010 ad FR=1; Date Acquired: 02-05-2022
15:03:36 IST; Vial: 1; Injection: 4



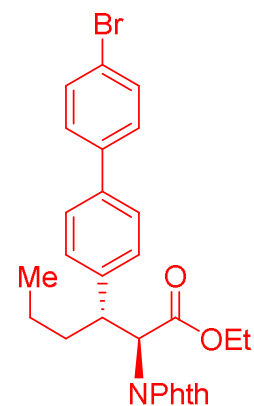
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb740 rephexipa9010 ad FR=1	1	4	22.039	10728861	97.25	127158
2	sb740 rephexipa9010 ad FR=1	1	4	17.146	303133	2.75	6805
Mean				19.593			
Std. Dev.				3.460			

The enantiomeric ratio ($er = 97:3$) of the compound **8c-(D)** was determined by HPLC using the Daicel Chiralpak AD column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 17.14$ min, $t_D = 22.03$ min.



Sample Name: sb741 hexipa9010 ad FR=1; Date Acquired: 02-05-2022 13:49:31
IST; Vial: 1; Injection: 2



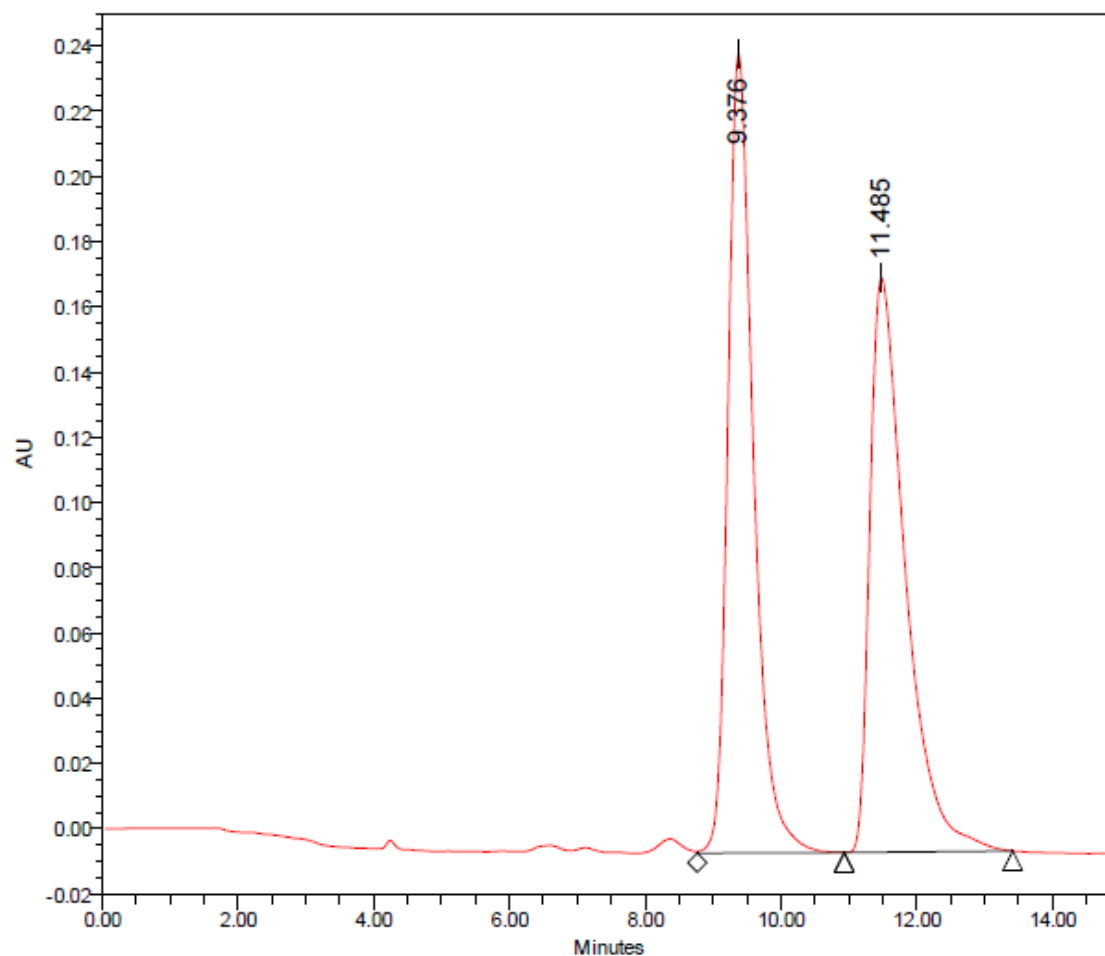
8c-(L)

Peak Summary with Statistics

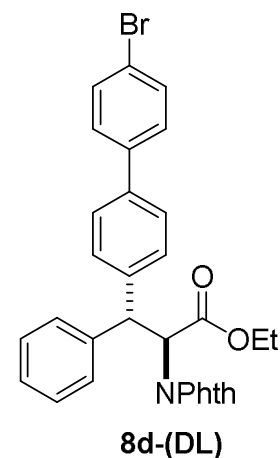
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb741 hexipa9010 ad FR=1	1	2	21.922	957112	2.75	21101
2	sb741 hexipa9010 ad FR=1	1	2	16.919	33835305	97.25	567922
Mean				19.420			
Std. Dev.				3.537			

The enantiomeric ratio ($er = 97:3$) of the compound **8c-(L)** was determined by HPLC using the Daicel Chiralpak AD column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_{R1} = 16.91$ min, $t_{R2} = 21.92$ min.



Sample Name: sb 260 hexipa 5050 ic FR=1; Date Acquired: 03-05-2022
11:07:35 IST; Vial: 1; Injection: 2

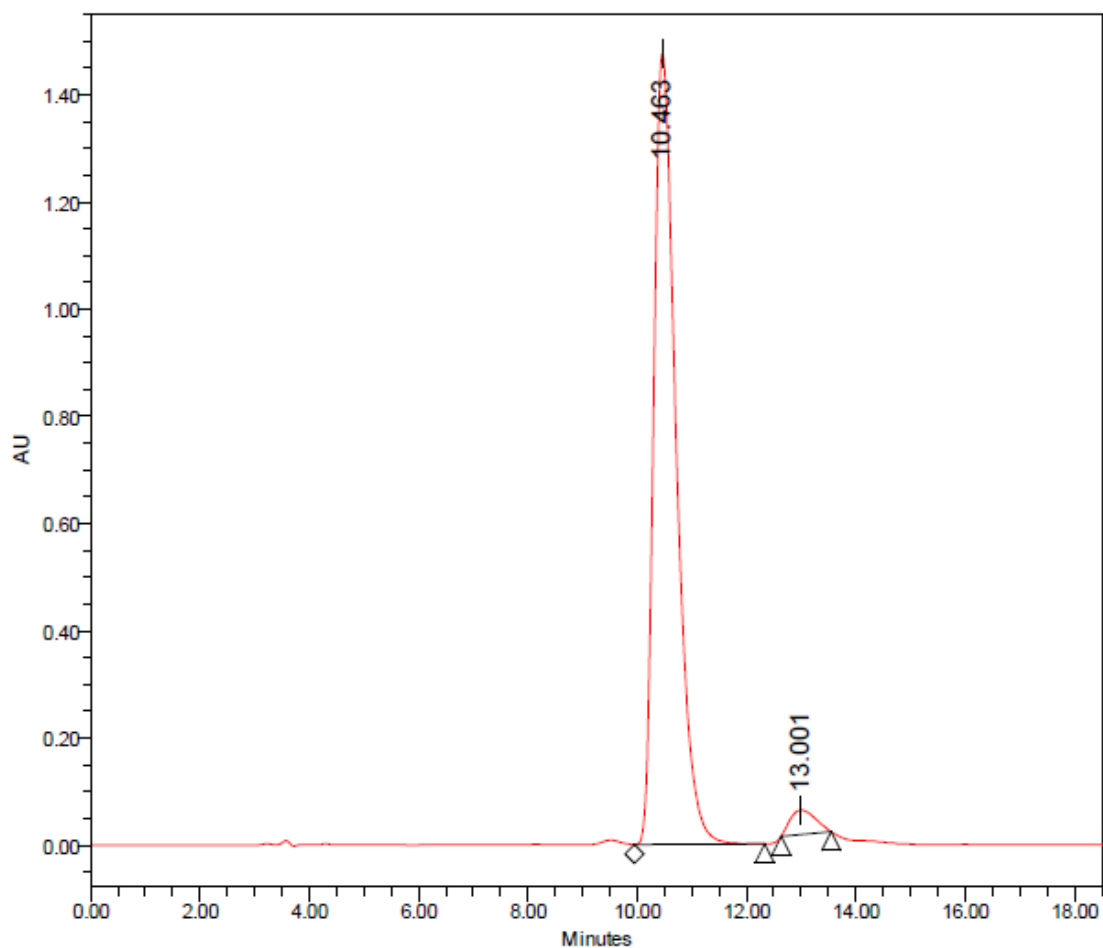


Peak Summary with Statistics

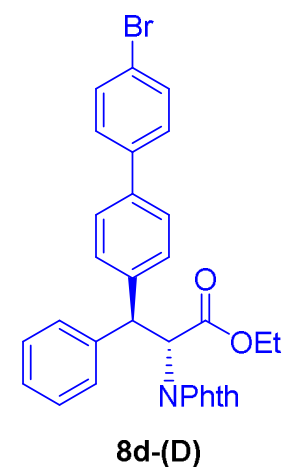
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 260 hexipa 5050 ic FR=1	1	2	11.485	6418816	49.96	176195
2	sb 260 hexipa 5050 ic FR=1	1	2	9.376	6429701	50.04	245288
Mean				10.431			
Std. Dev.				1.491			

The HPLC of the compound **8d-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 9.37$ min, $t_L = 11.48$ min.



Sample Name: sb 801REP hexipa 5050 ic FR=1; Date Acquired: 03-05-2022
11:49:01 IST; Vial: 1; Injection: 4

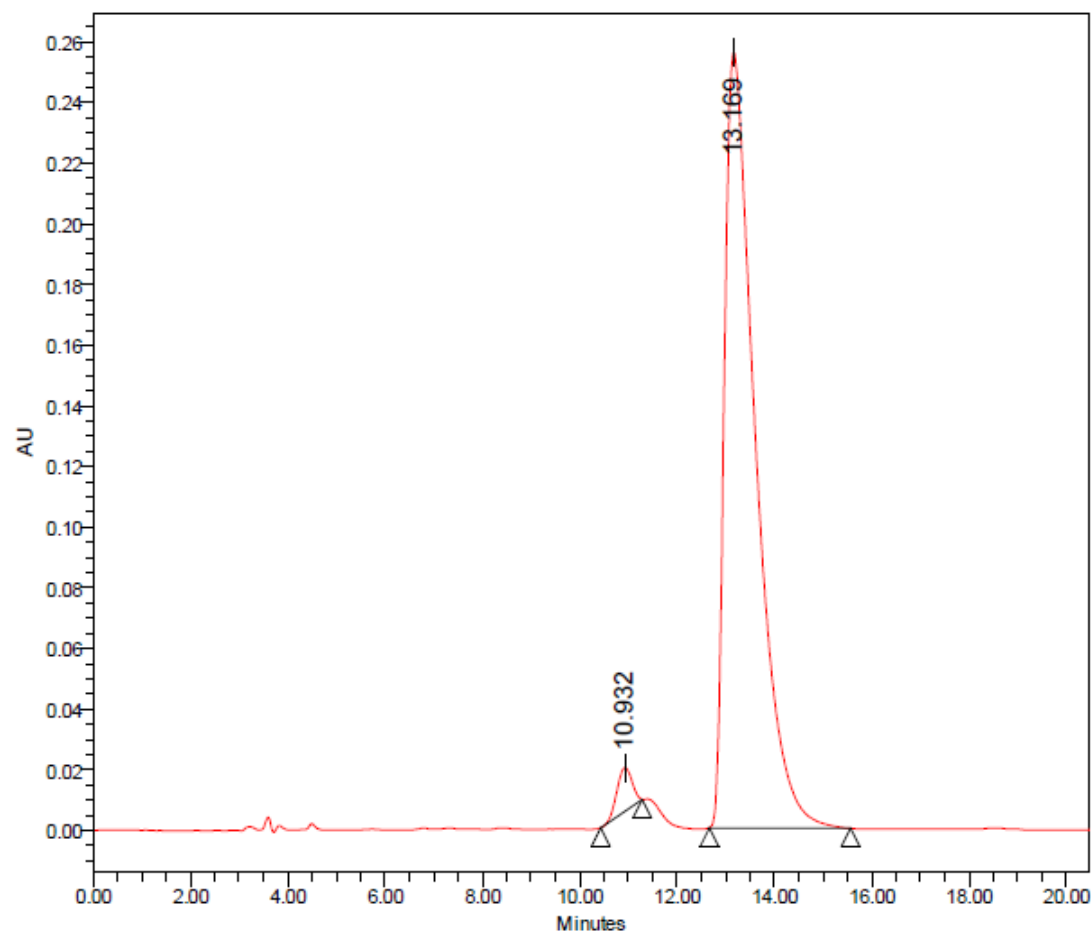


Peak Summary with Statistics

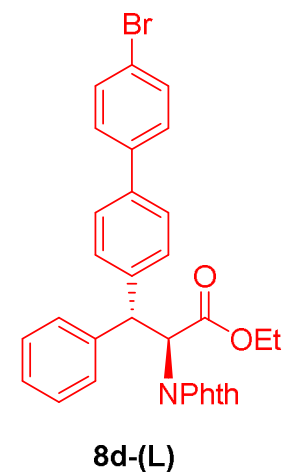
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 801REP hexipa 5050 ic FR=1	1	4	13.001	1456775	3.37	45464
2	sb 801REP hexipa 5050 ic FR=1	1	4	10.463	41801172	96.63	1476122
Mean				11.732			
Std. Dev.				1.794			

The enantiomeric ratio ($er = 97:3$) of the compound **8d-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 10.46$ min, $t_L = 13.00$ min.



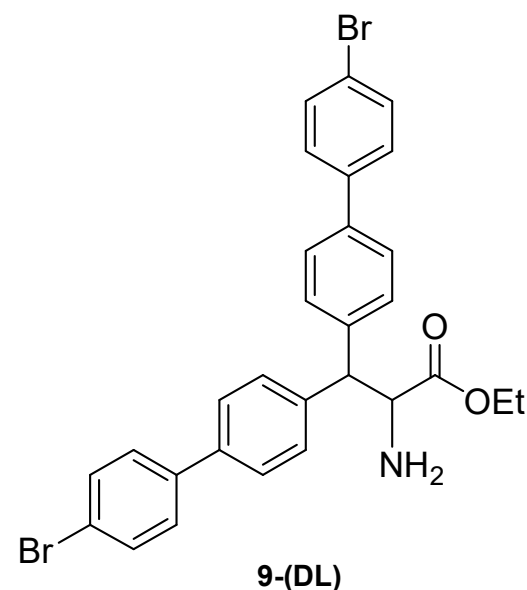
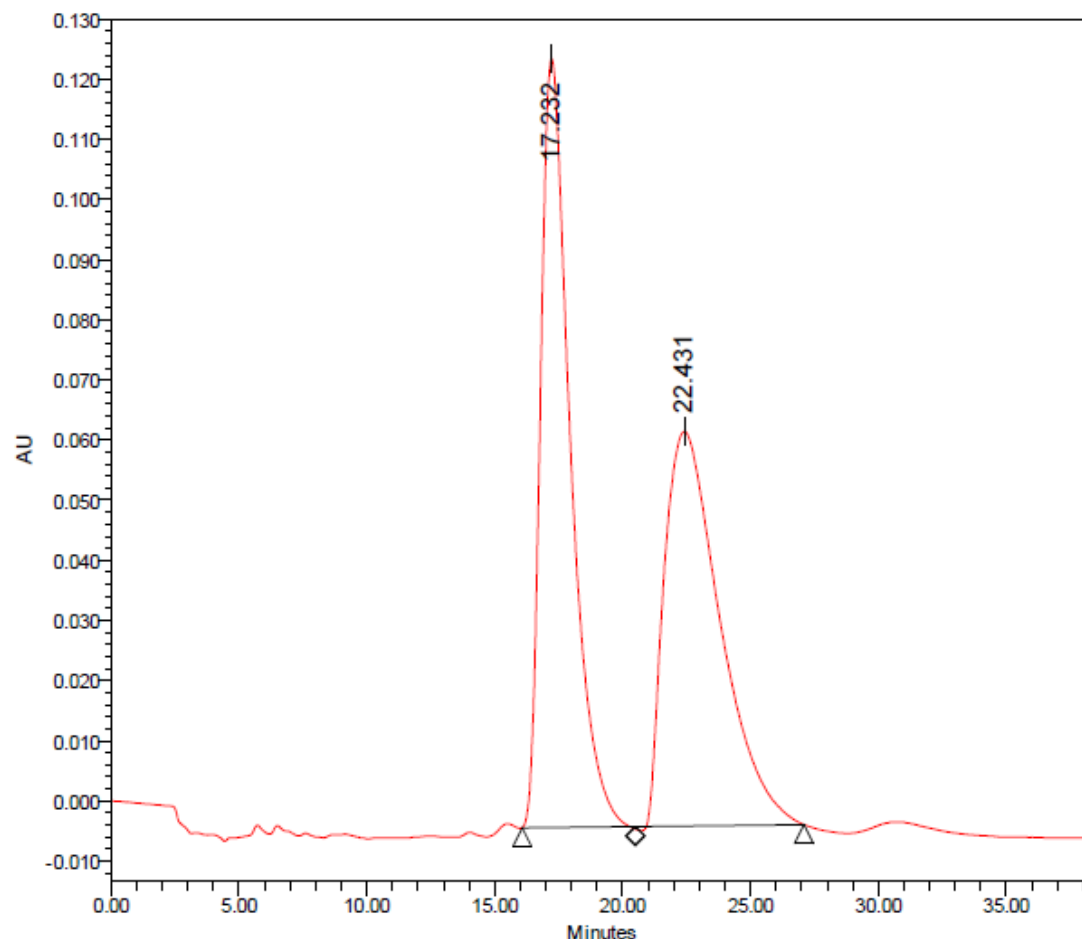
Sample Name: sb 480 REP-3hexipa 5050 ic FR=1; Date Acquired: 03-05-2022
12:56:01 IST; Vial: 1; Injection: 7



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 480 REP-3hexipa 5050 ic FR=1	1	7	13.169	1126119	97.34	255807
2	sb 480 REP-3hexipa 5050 ic FR=1	1	7	10.932	307672	2.66	14319
Mean				12.051			
Std. Dev.				1.581			

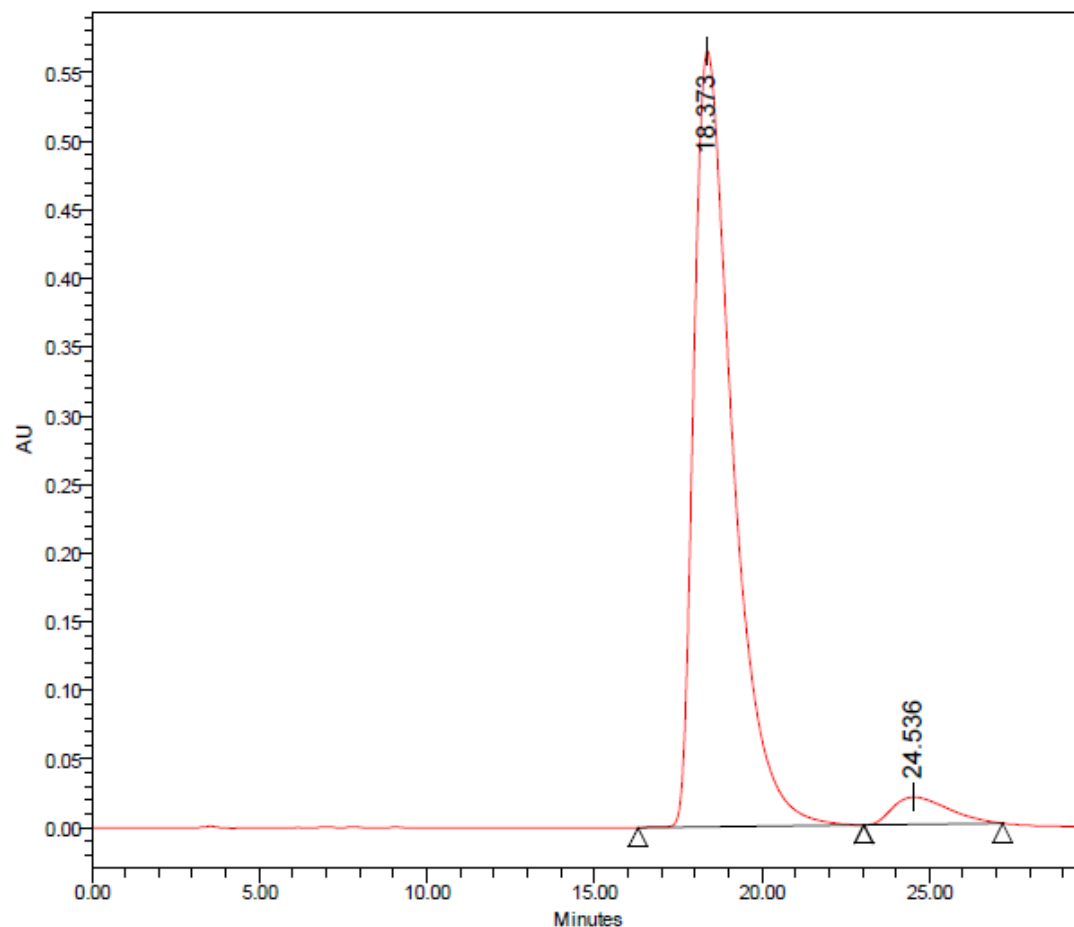
The enantiomeric ratio ($er = 97:3$) of the compound **8d-(L)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 10.93$ min, $t_L = 13.16$ min.



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 682 hex ipa 9010 odh FR1	1	4	22.431	9951291	49.10	65593
2	SB 682 hex ipa 9010 odh FR1	1	4	17.232	10316637	50.90	127860
Mean				19.831			
Std. Dev.				3.677			

The HPLC of the compound **9-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 17.23$ min, $t_L = 22.43$ min.

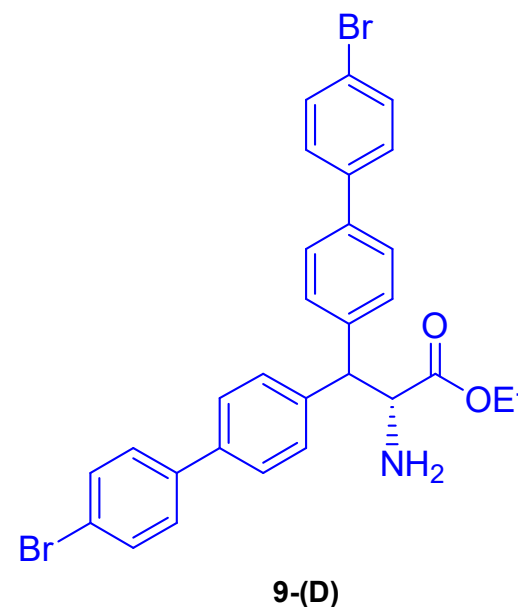


Sample Name: SB1133 hex ipa 9010 odh FR1; Date Acquired: 28-06-2024
17:50:44 IST; Vial: 1; Injection: 5

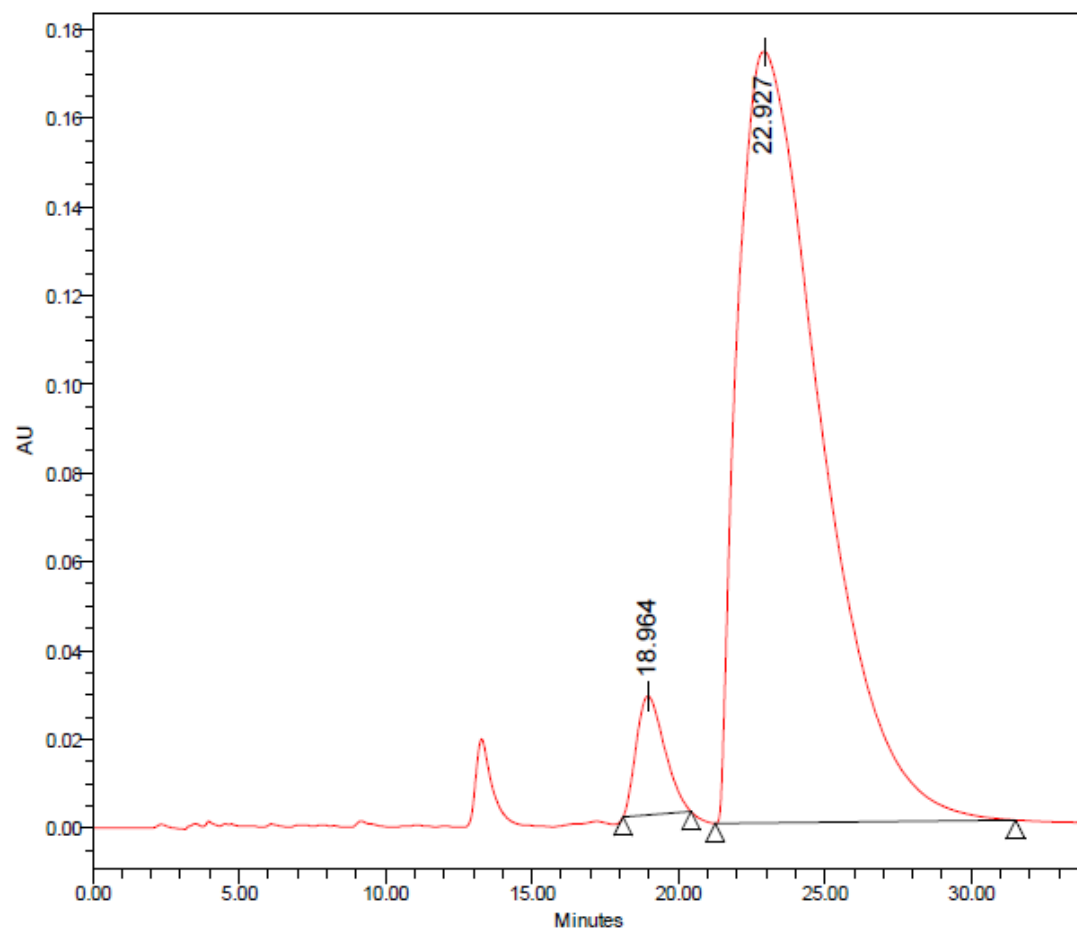
Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB1133 hex ipa 9010 odh FR1	1	5	24.536	2304013	4.83	19940
2	SB1133 hex ipa 9010 odh FR1	1	5	18.373	45381863	95.17	564930
Mean				21.454			
Std. Dev.				4.358			



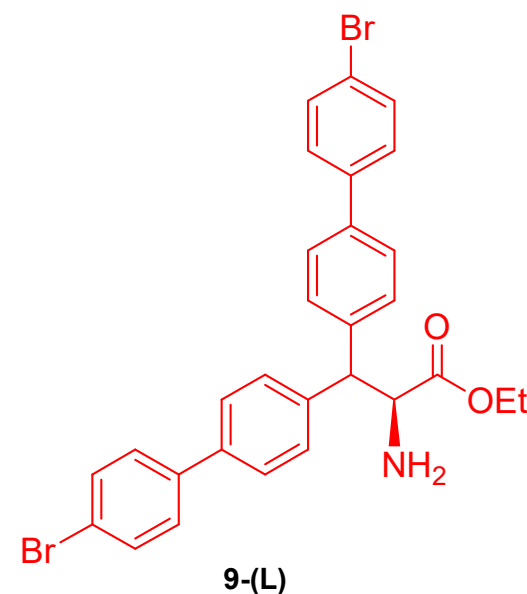
The enantiomeric ratio ($er = 95:5$) of the compound **9-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 18.37$ min, $t_L = 22.53$ min.



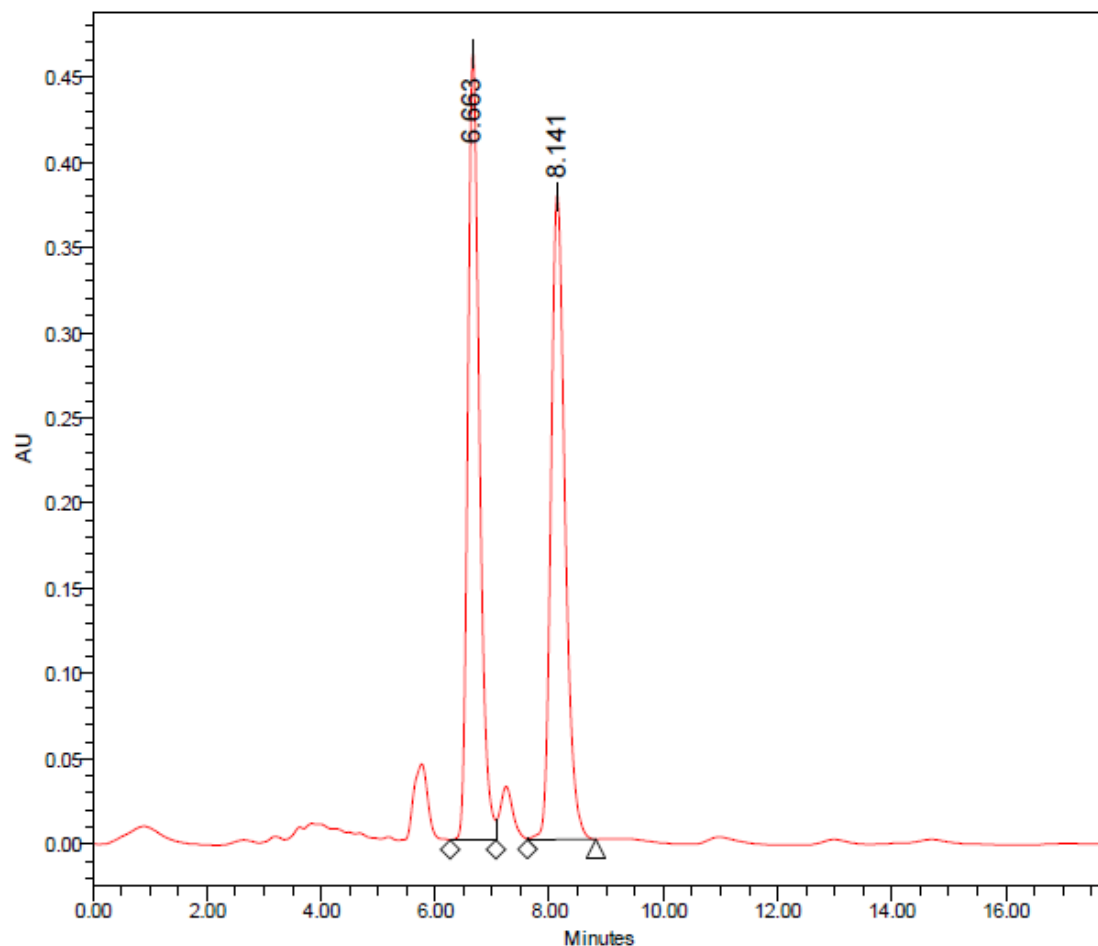
Sample Name: sb 1191 rep hex ipa 9010 odh FR1; Date Acquired: 28-06-2024
19:05:16 IST; Vial: 1; Injection: 8

Peak Summary with Statistics
Name:

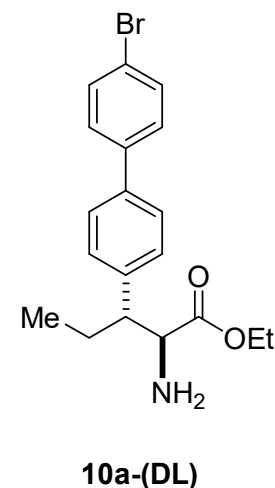
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1191 rep hex ipa 9010 odh FR1	1	8	22.927	34335182	95.02	173798
2	sb 1191 rep hex ipa 9010 odh FR1	1	8	18.964	1797900	4.98	26772
Mean				20.946			
Std. Dev.				2.802			



The enantiomeric ratio ($er = 95:5$) of the compound **9-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 18.96$ min, $t_L = 22.92$ min.



Sample Name: sb 608 REP 3 hexipa9010 odh FR=1; Date Acquired: 03-05-2022
16:27:56 IST; Vial: 1; Injection: 8

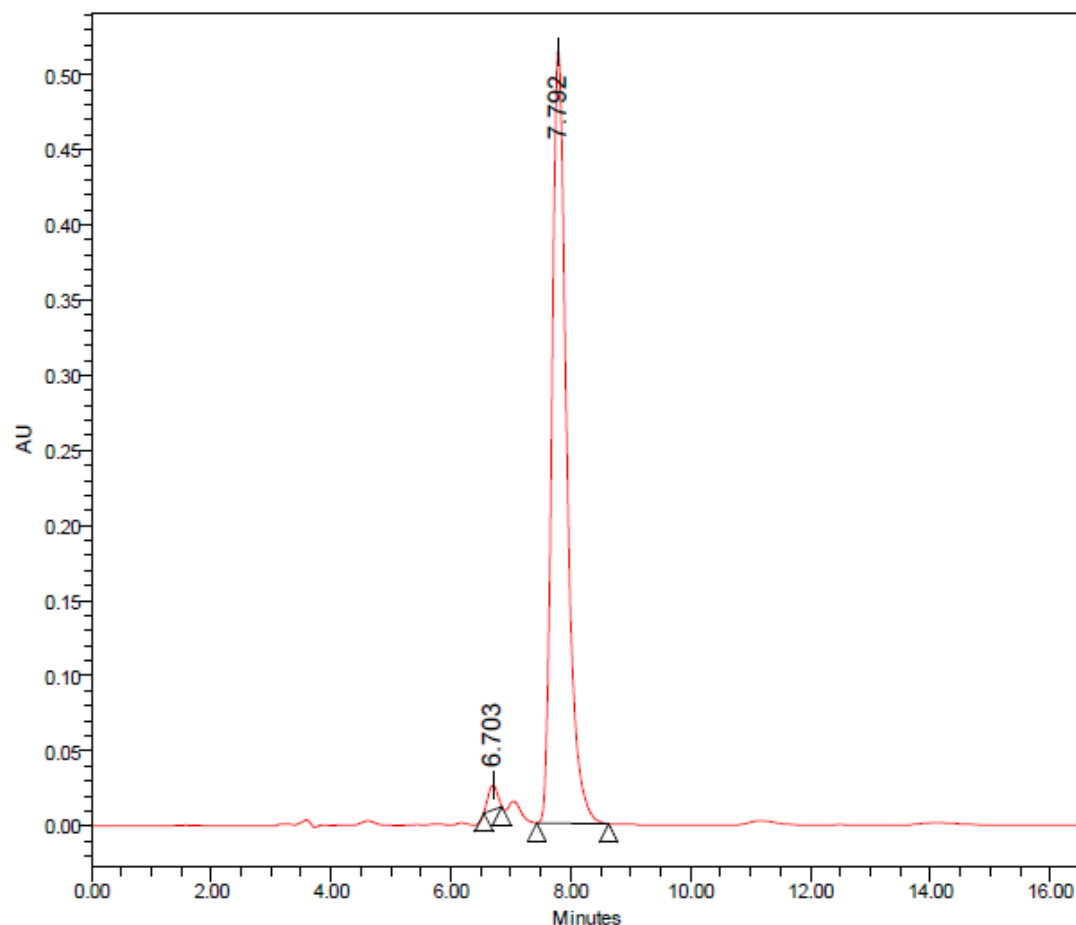


Peak Summary with Statistics

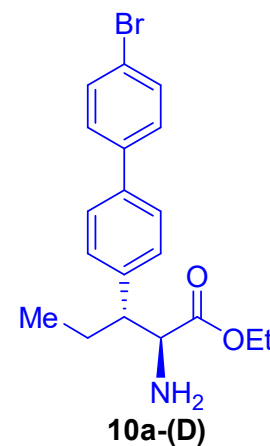
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 608 REP 3 hexipa9010 odh FR=1	1	8	8.141	6422250	49.74	378287
2	sb 608 REP 3 hexipa9010 odh FR=1	1	8	6.663	6489928	50.26	462236
Mean				7.402			
Std. Dev.				1.045			

The HPLC of the compound **10a-DL** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 6.66$ min, $t_D = 8.14$ min.



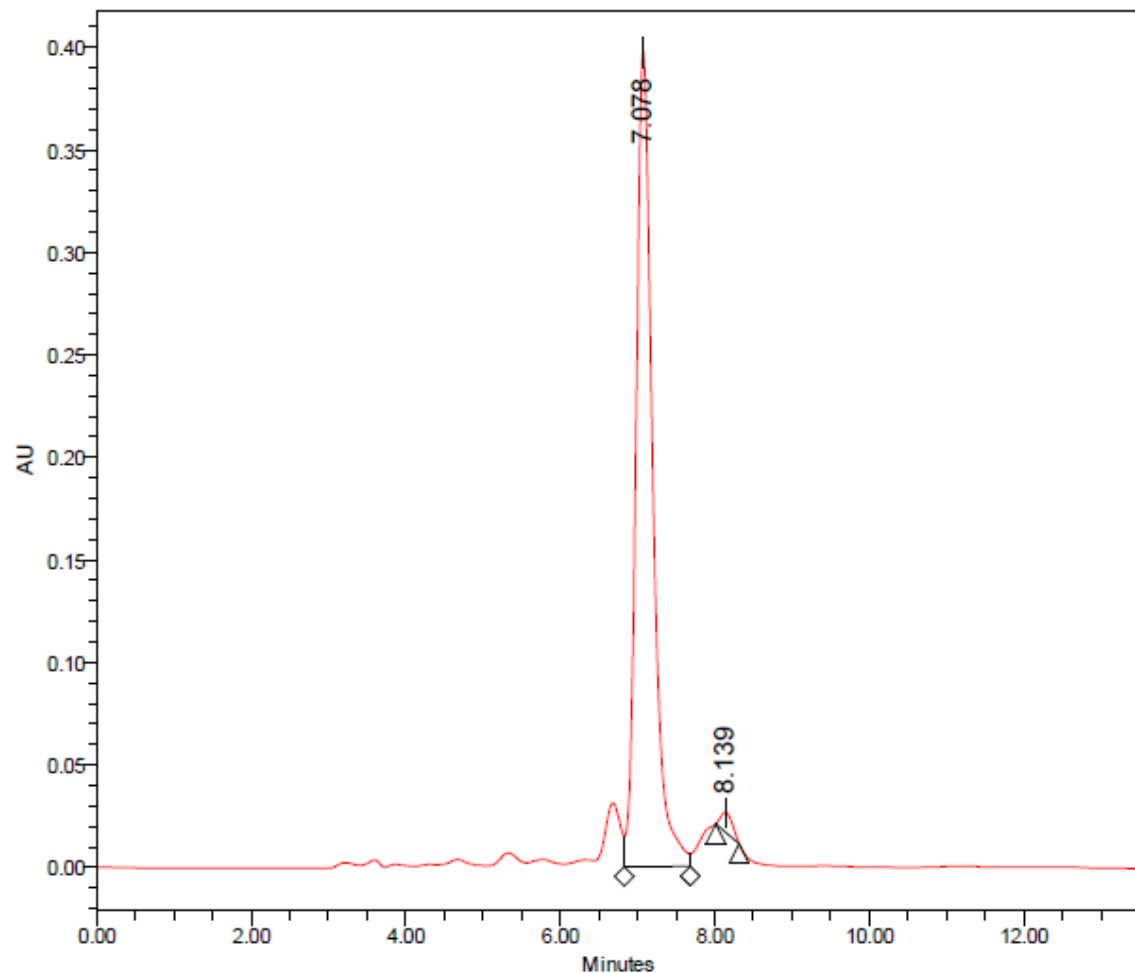
Sample Name: sb 760 REP 3 hexipa9010 odh FR=1; Date Acquired: 03-05-2022
16:00:07 IST; Vial: 1; Injection: 6



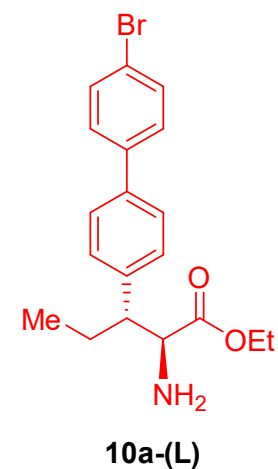
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 760 REP 3 hexipa9010 odh FR=1	1	6	7.792	8852027	98.09	515265
2	sb 760 REP 3 hexipa9010 odh FR=1	1	6	6.703	172118	1.91	16237
Mean				7.247			
Std. Dev.				0.770			

The enantiomeric ratio ($er = 98:2$) of the compound **10a-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 6.70$ min, $t_D = 7.79$ min.



Sample Name: sb 704 REP 3 hexipa9010 odh FR=1; Date Acquired: 03-05-2022
16:46:25 IST; Vial: 1; Injection: 9

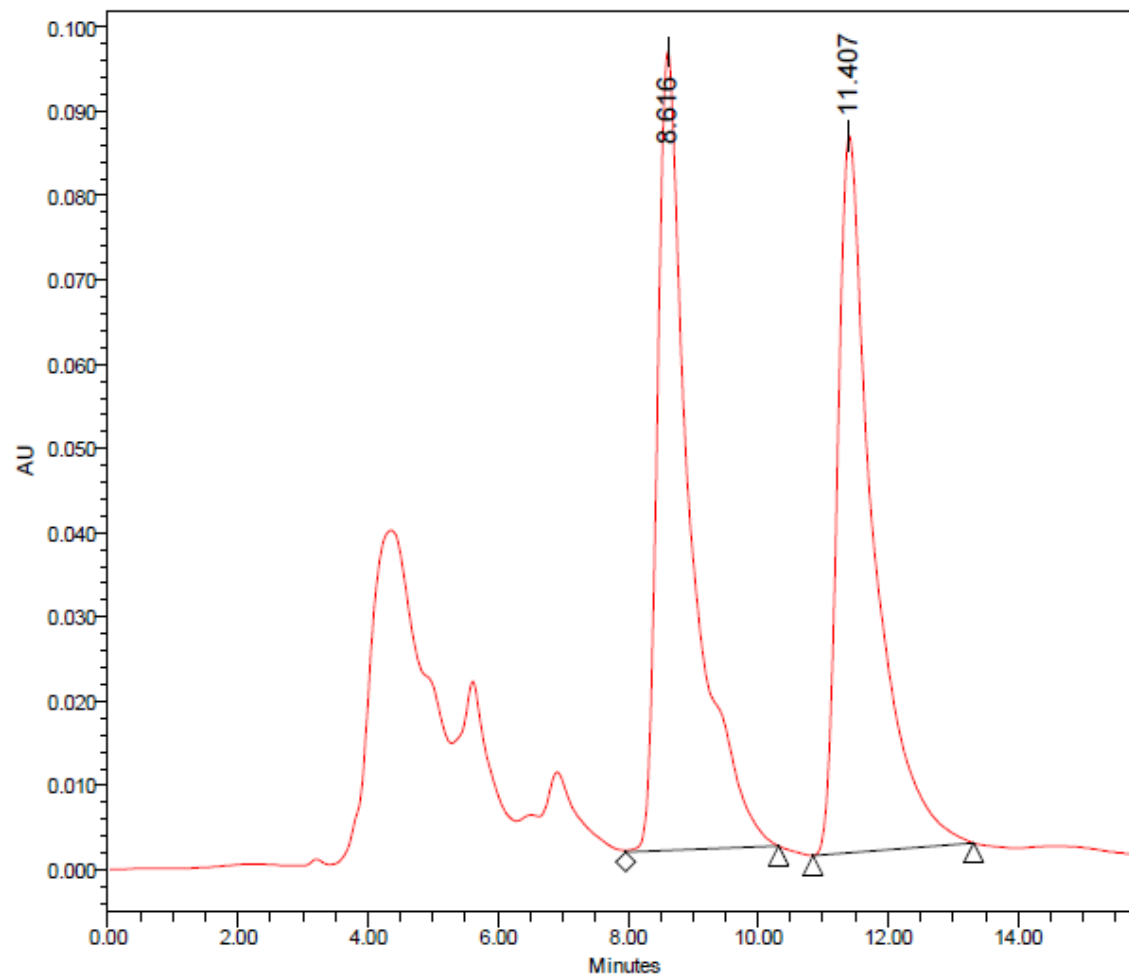


Peak Summary with Statistics

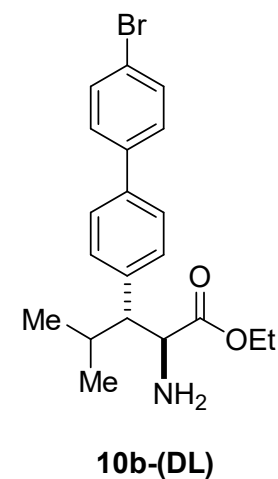
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 704 REP 3 hexipa9010 odh FR=1	1	9	8.139	103185	1.71	9527
2	sb 704 REP 3 hexipa9010 odh FR=1	1	9	7.078	5946419	98.29	398262
Mean				7.608			
Std. Dev.				0.750			

The enantiomeric ratio ($er = 98:2$) of the compound **10a-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (90:10), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 7.07$ min, $t_D = 8.13$ min.



Sample Name: SB 629 HEX IPA9505 odh FR1; Date Acquired: 28-06-2024
11:54:48 IST; Vial: 1; Injection: 3

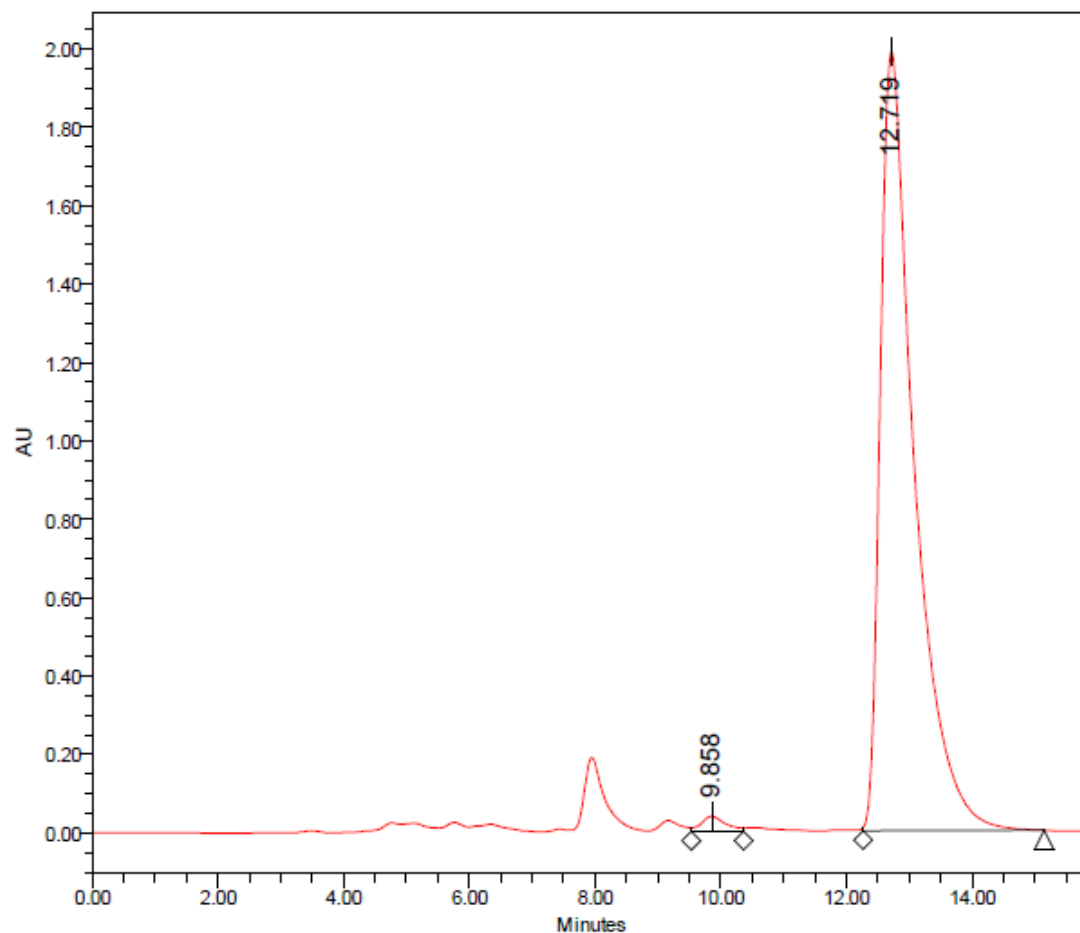


Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 629 HEX IPA9505 odh FR1	1	3	11.407	3260181	49.16	85091
2	SB 629 HEX IPA9505 odh FR1	1	3	8.616	3371805	50.84	94769
Mean				10.011			
Std. Dev.				1.974			

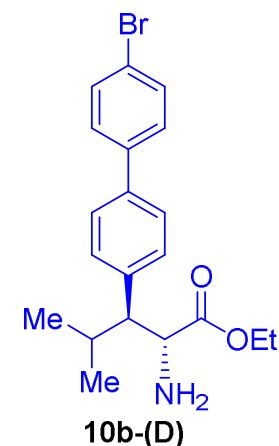
The HPLC of the compound **10b-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 8.61$ min, $t_D = 11.40$ min.



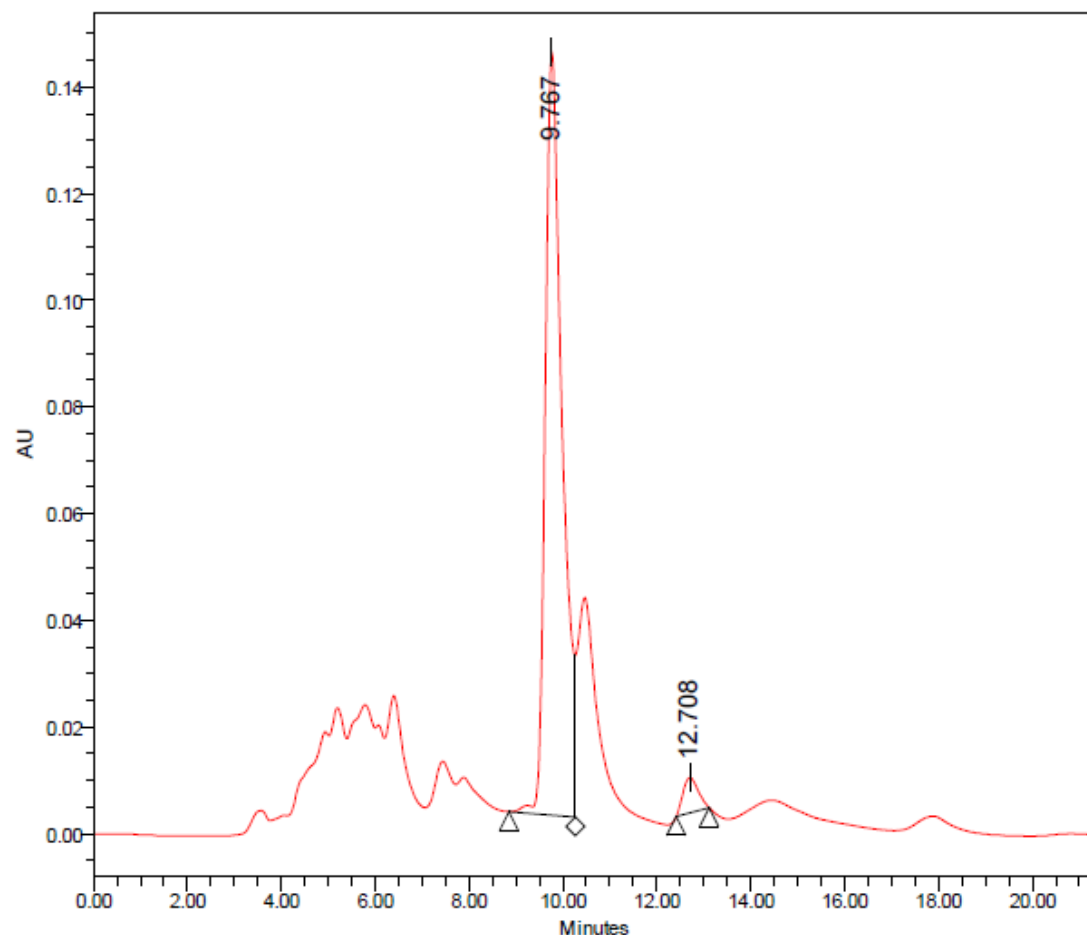
Peak Summary with Statistics

Name:

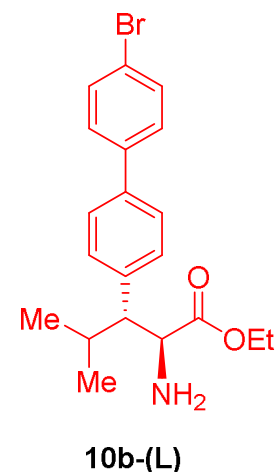
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB713R1 HEX IPA9505 odh FR1	1	6	12.719	74621407	98.63	1988220
2	SB713R1 HEX IPA9505 odh FR1	1	6	9.858	1038286	1.37	38371
Mean				11.289			
Std. Dev.				2.023			



The enantiomeric ratio ($er = 98:2$) of the compound **10b-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 9.85$ min, $t_D = 12.71$ min.



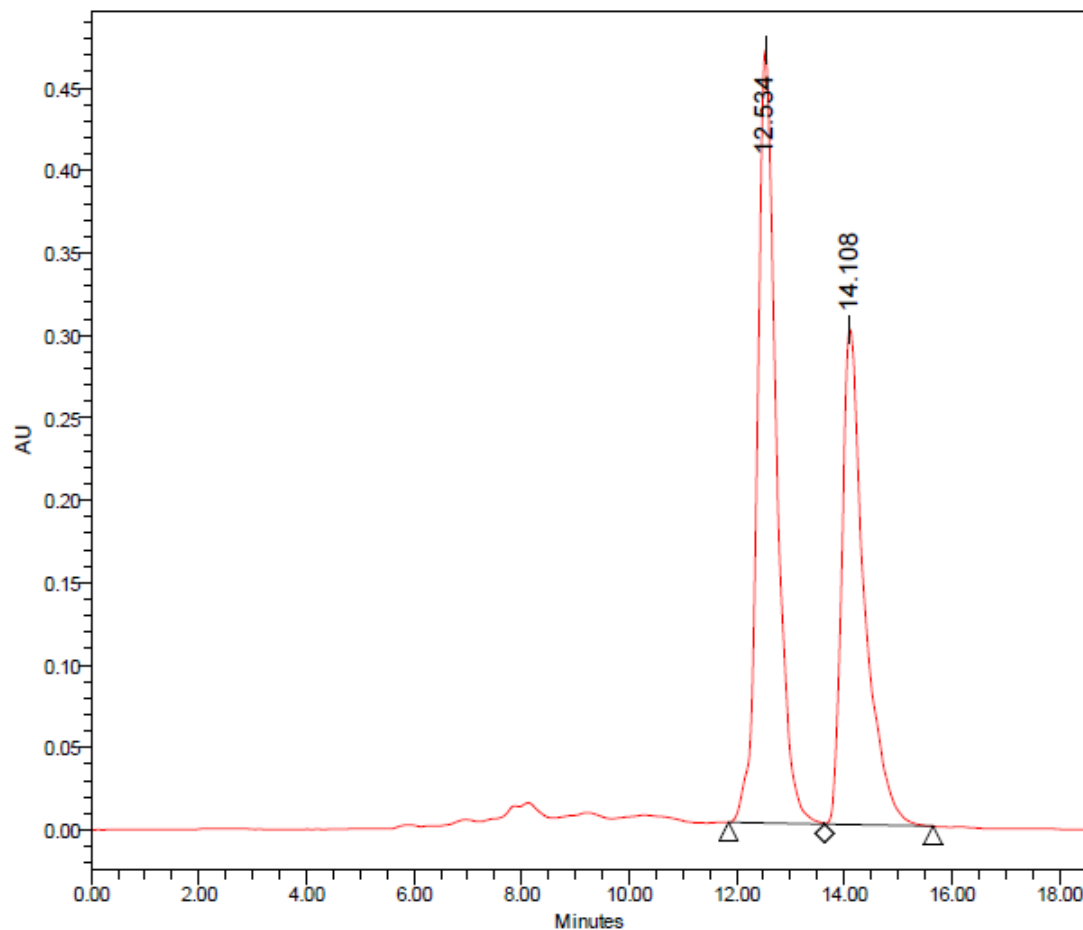
Sample Name: SB727 HEX IPA9505 odh FR1; Date Acquired: 28-06-2024
 12:11:14 IST; Vial: 1; Injection: 4



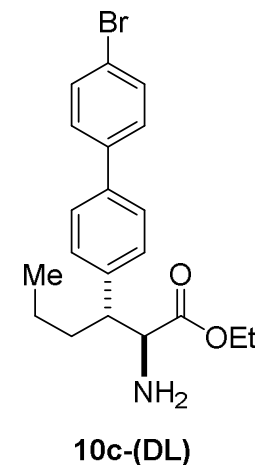
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB727 HEX IPA9505 odh FR1	1	4	12.708	148209	3.96	6616
2	SB727 HEX IPA9505 odh FR1	1	4	9.767	3596284	96.04	143119
Mean				11.237			
Std. Dev.				2.079			

The enantiomeric ratio ($er = 90:10$) of the compound **10b-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 9.76$ min, $t_D = 12.70$ min.



Sample Name: SB-654 REP HEXIPA9505ODH FR-1 ; Date Acquired:
13-10-2022 16:06:00 IST; Vial: 1; Injection: 8

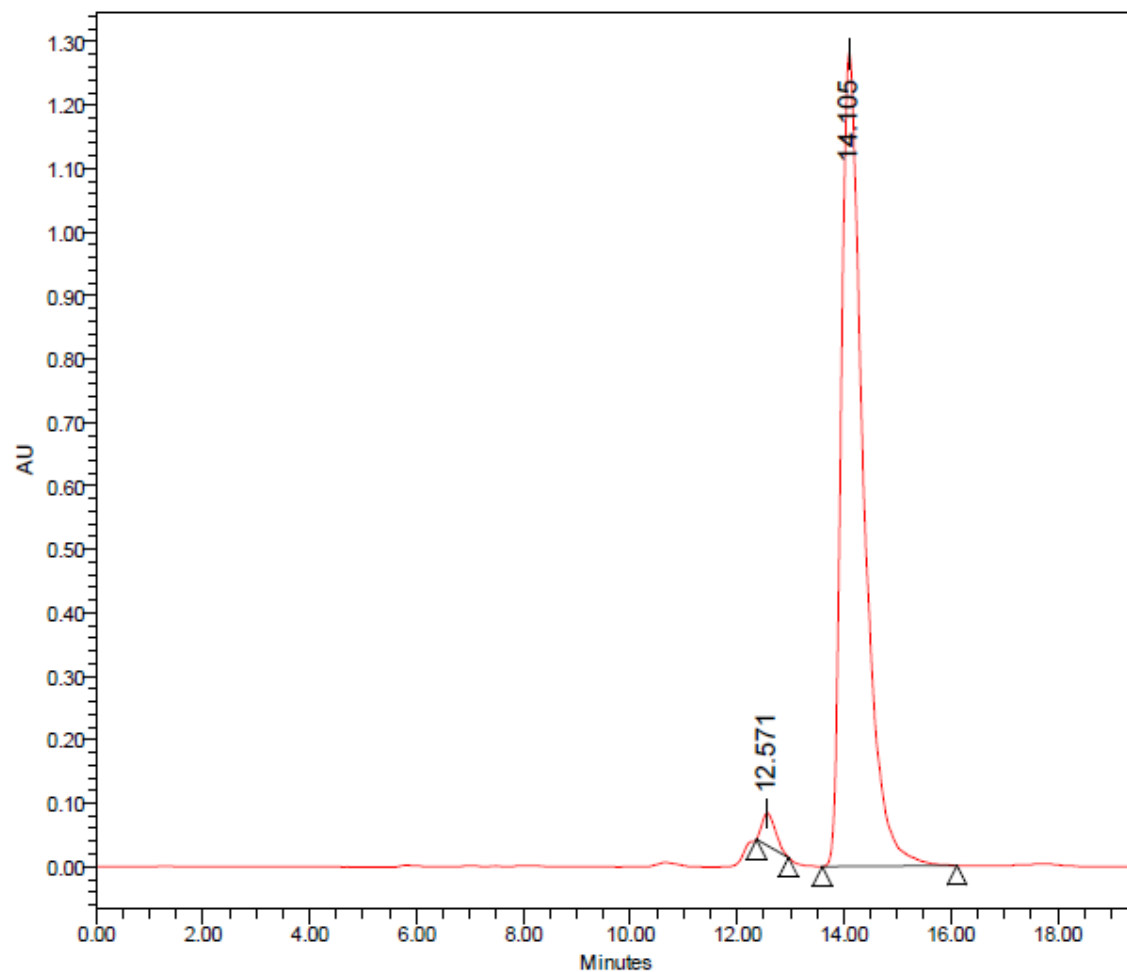


Peak Summary with Statistics

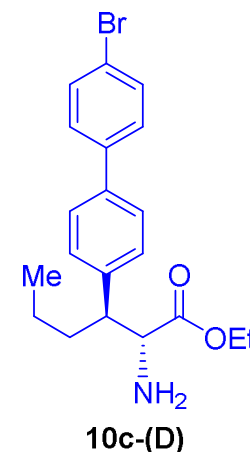
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB-654 REP HEXIPA9505ODH FR-1	1	8	14.108	8740137	43.10	300884
2	SB-654 REP HEXIPA9505ODH FR-1	1	8	12.534	11537234	56.90	468824
Mean				13.321			
Std. Dev.				1.113			

The HPLC of the compound **10c-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 12.53$ min, $t_D = 14.10$ min.



Sample Name: SB-761 REP HEXIPA9505ODH FR-1 ; Date Acquired: 13-10-2022 16:26:00 IST; Vial: 1; Injection: 10

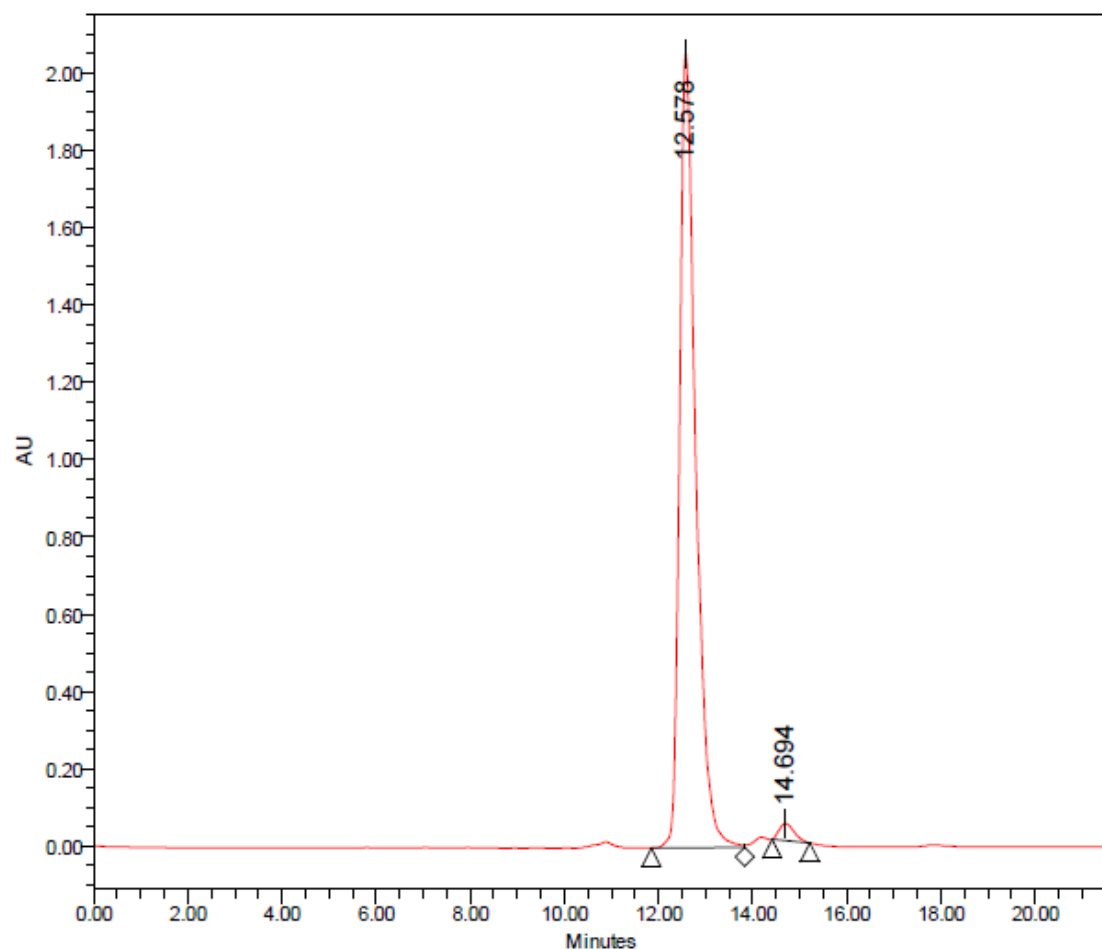


Peak Summary with Statistics

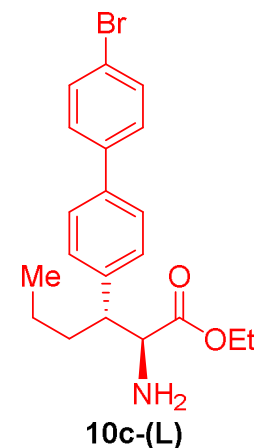
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB-761 REP HEXIPA9505ODH FR-1	1	10	14.105	37016963	97.64	1282302
2	SB-761 REP HEXIPA9505ODH FR-1	1	10	12.571	895013	2.36	51418
Mean				13.338			
Std. Dev.				1.085			

The enantiomeric ratio ($er = 97:3$) of the compound **10c-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 12.57$ min, $t_D = 14.10$ min.



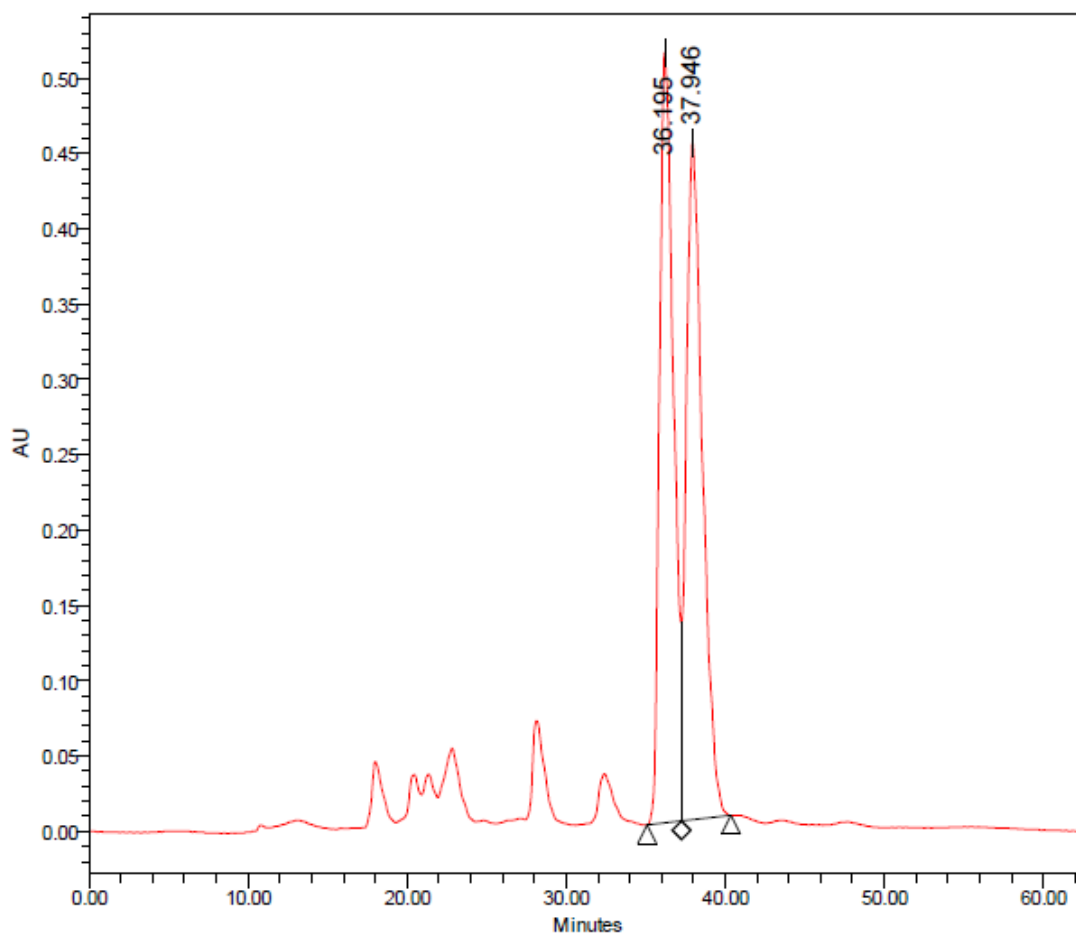
Sample Name: SB-817-R1 HEXIPA9505ODH FR-1 ; Date Acquired: 13-10-2022
15:43:45 IST; Vial: 1; Injection: 7



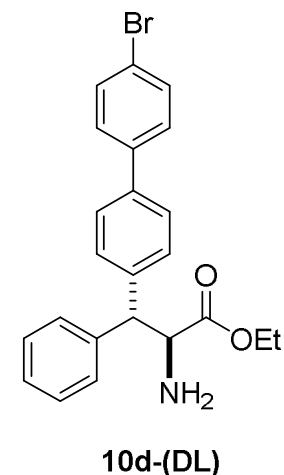
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB-817-R1 HEXIPA9505ODH FR-1	1	7	14.694	979188	1.96	44471
2	SB-817-R1 HEXIPA9505ODH FR-1	1	7	12.578	48985003	98.04	2053828
Mean				13.636			
Std. Dev.				1.496			

The enantiomeric ratio ($er = 98:2$) of the compound **10c-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 12.57$ min, $t_D = 14.69$ min.



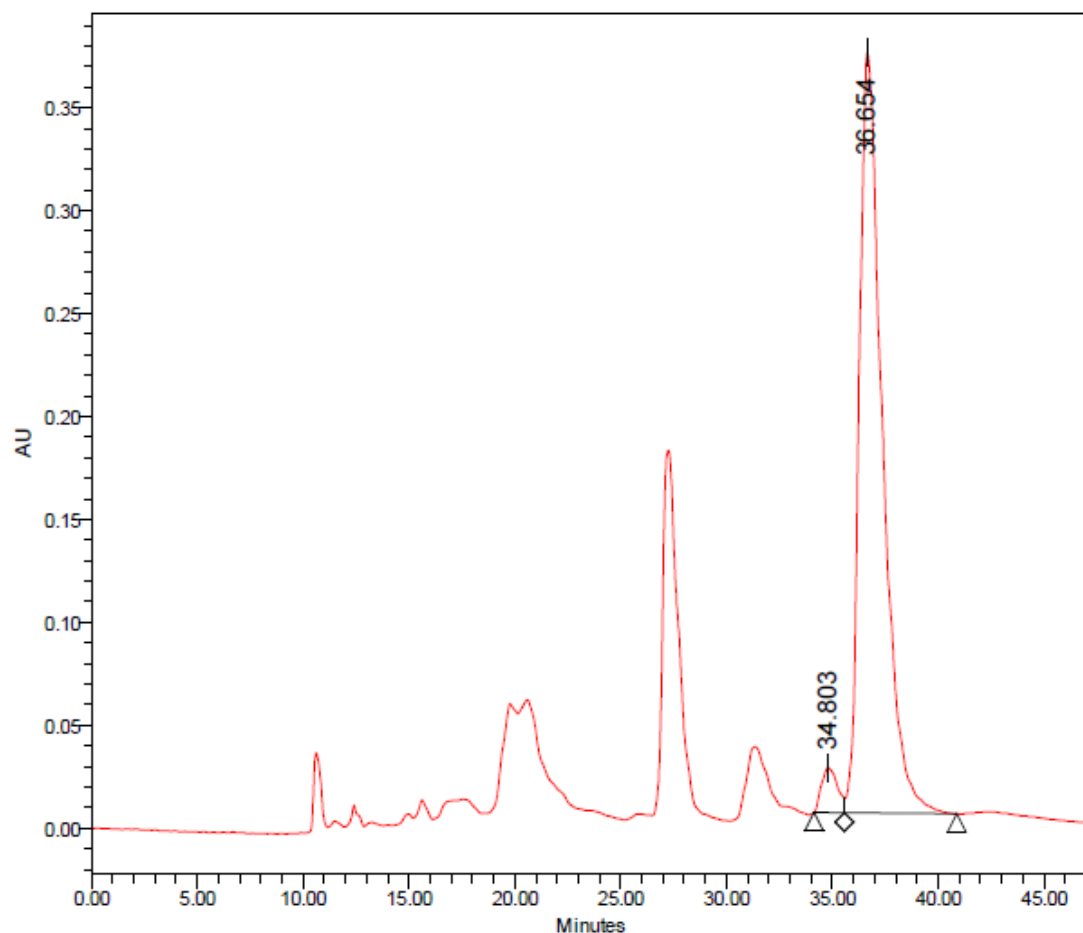
Sample Name: sb 545 hexipa 9505 odh fr0.5; Date Acquired: 31-12-2022
16:23:32 IST; Vial: 1; Injection: 8



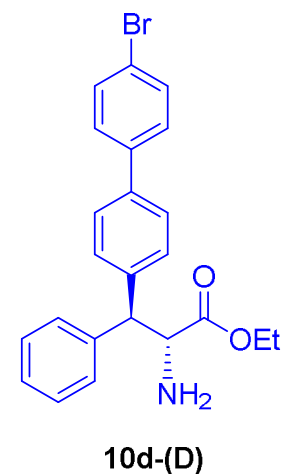
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 545 hexipa 9505 odh fr0.5	1	8	37.946	32226828	50.69	449497
2	sb 545 hexipa 9505 odh fr0.5	1	8	36.195	31348918	49.31	511396
Mean				37.071			
Std. Dev.				1.238			

The HPLC of the compound **10d-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 0.5 mL/min, UV detection at 254 nm, $t_L = 36.19$ min, $t_D = 37.94$ min.



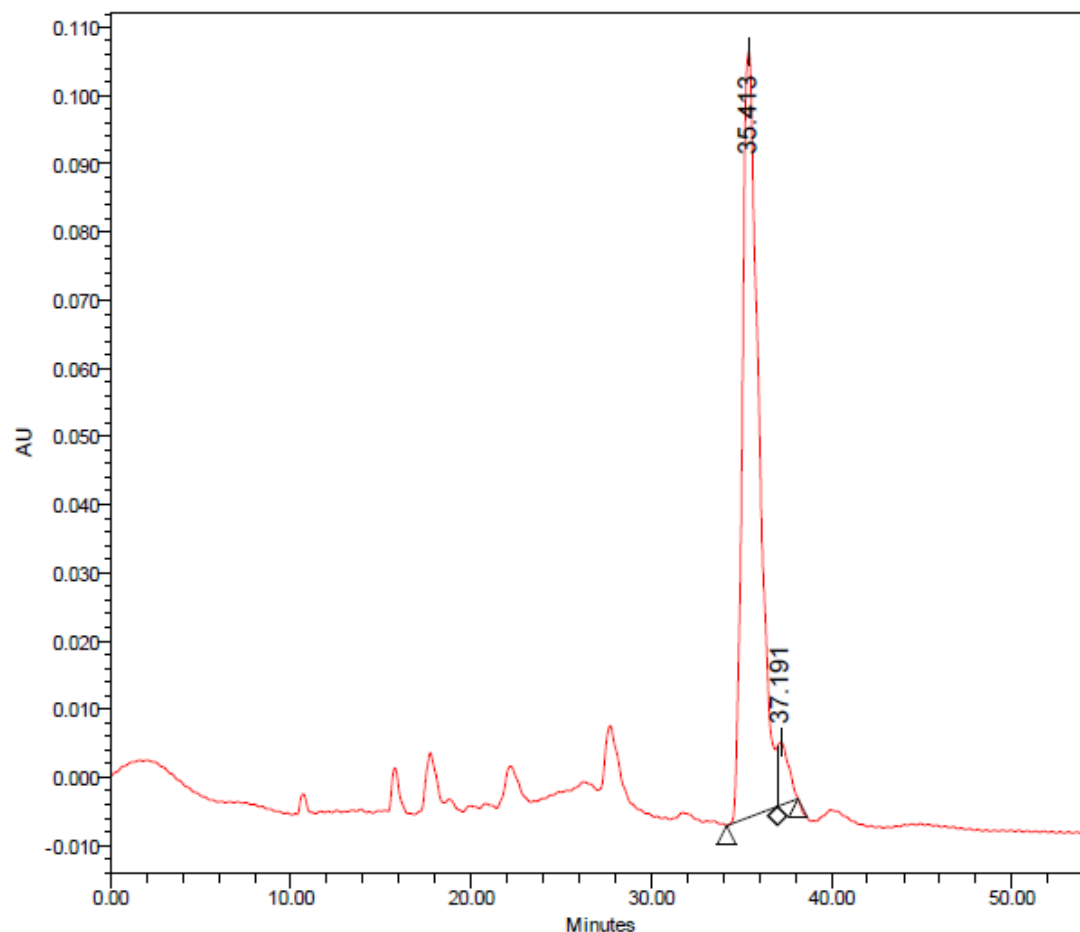
Sample Name: sb 898 hexipa 9505 odh fr0.5; Date Acquired: 31-12-2022
17:49:28 IST; Vial: 1; Injection: 9



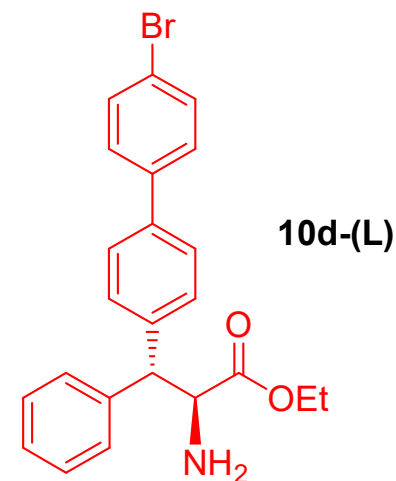
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 898 hexipa 9505 odh fr0.5	1	9	36.654	28132366	96.10	369460
2	sb 898 hexipa 9505 odh fr0.5	1	9	34.803	1141565	3.90	21801
Mean				35.729			
Std. Dev.				1.310			

The enantiomeric ratio ($er = 96:4$) of the compound **10d-D** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 0.5 mL/min, UV detection at 254 nm, $t_L = 34.80$ min, $t_D = 36.65$ min.



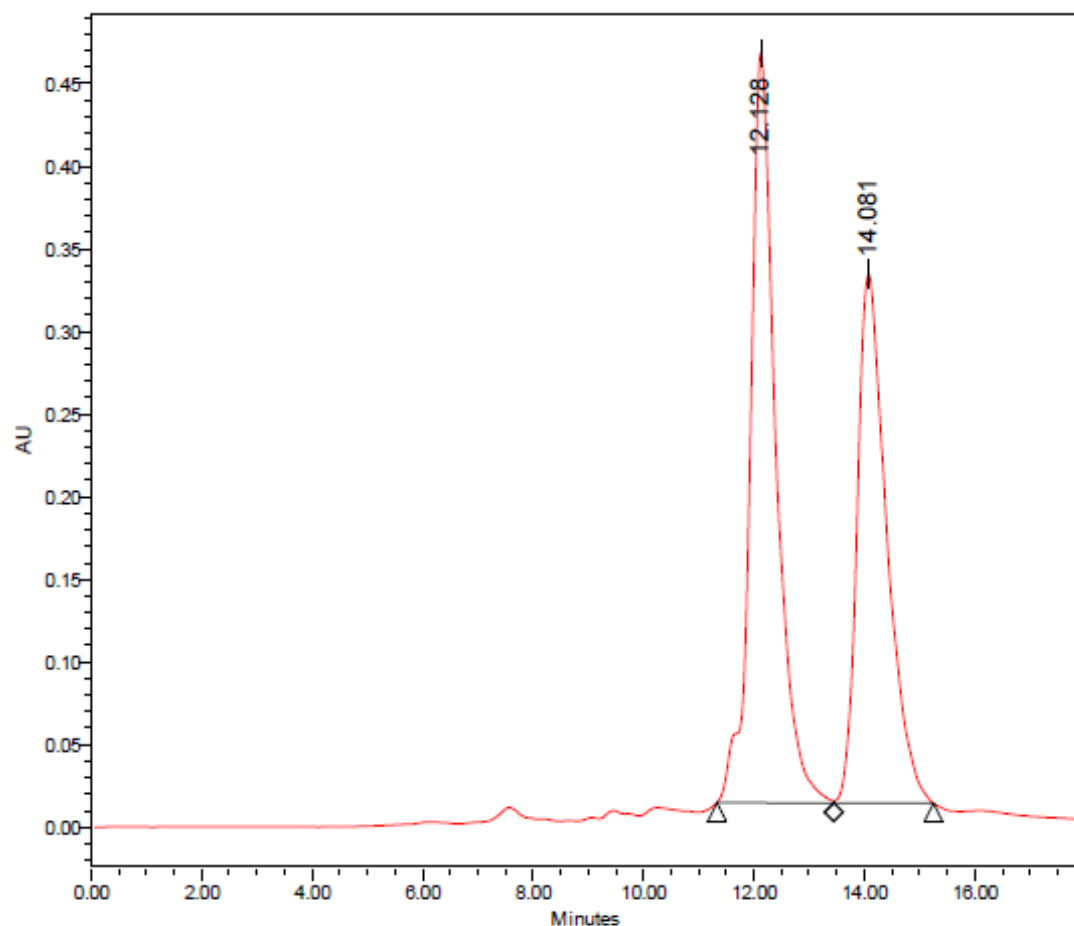
Sample Name: sb 490 hexipa 9505 odh fr0.5; Date Acquired: 31-12-2022
18:37:54 IST; Vial: 1; Injection: 11



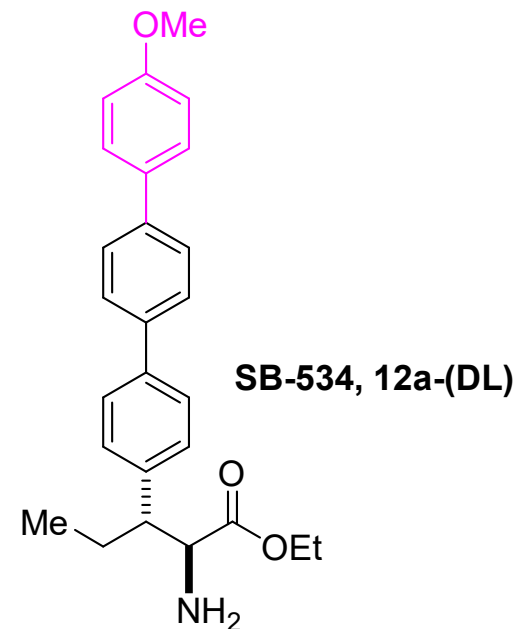
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 490 hexipa 9505 odh fr0.5	1	11	37.191	376186	5.00	9211
2	sb 490 hexipa 9505 odh fr0.5	1	11	35.413	7154589	95.00	112296
Mean				36.302			
Std. Dev.				1.257			

The enantiomeric ratio ($er = 95:5$) of the compound **10d-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 0.5 mL/min, UV detection at 254 nm, $t_L = 35.41$ min, $t_D = 37.19$ min.



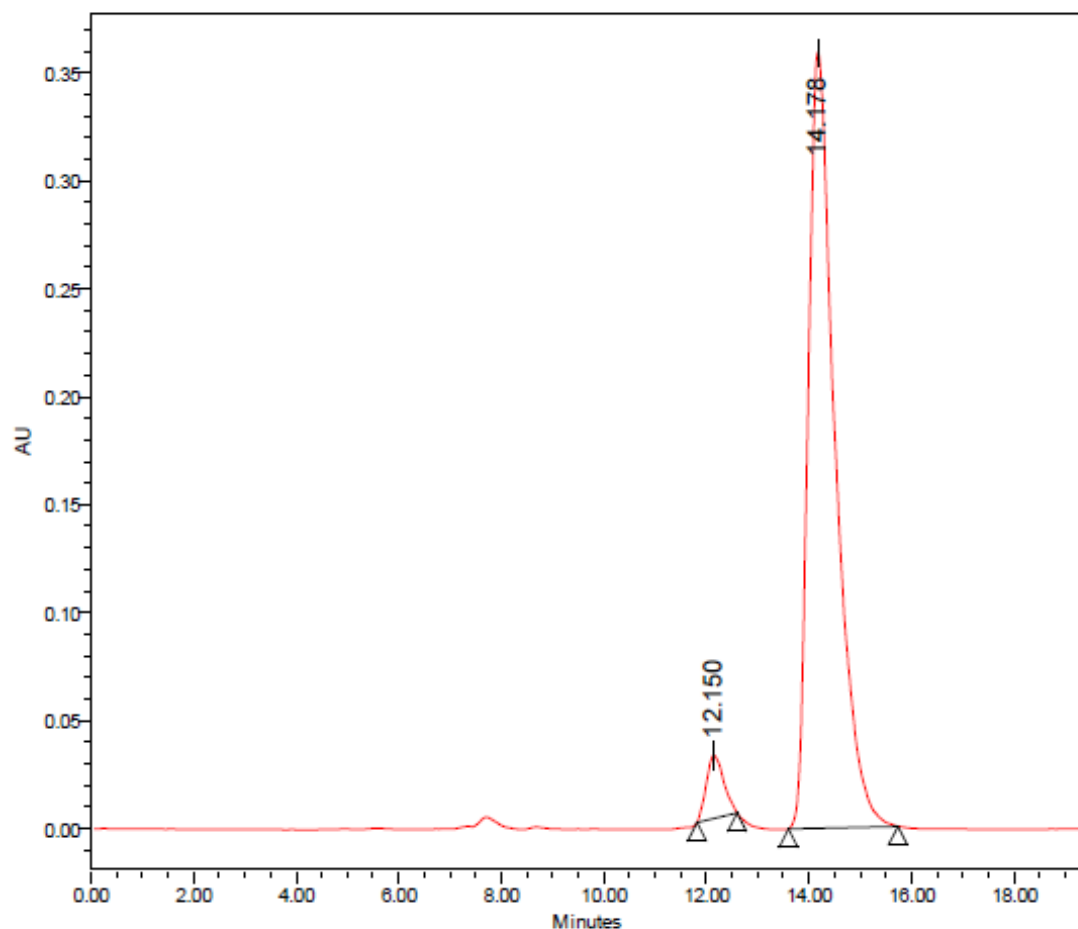
Sample Name: SB 534 REP HEXIPA8020-ODHFR=1; Date Acquired: 07-06-2023 14:53:50 IST; Vial: 1; Injection: 2



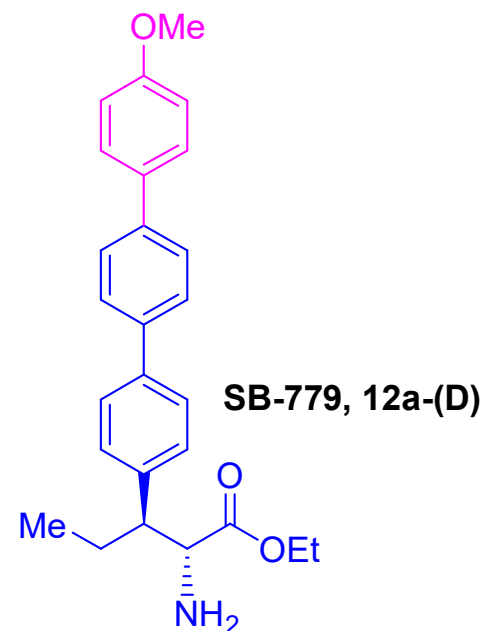
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 534 REP HEXIPA8020-ODHFR=1	1	2	14.081	11857358	44.82	320076
2	SB 534 REP HEXIPA8020-ODHFR=1	1	2	12.128	14598851	55.18	463929
Mean				13.105			
Std. Dev.				1.381			

The HPLC of the compound **12a-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 291.7 nm, $t_L = 12.12$ min, $t_D = 14.08$ min.



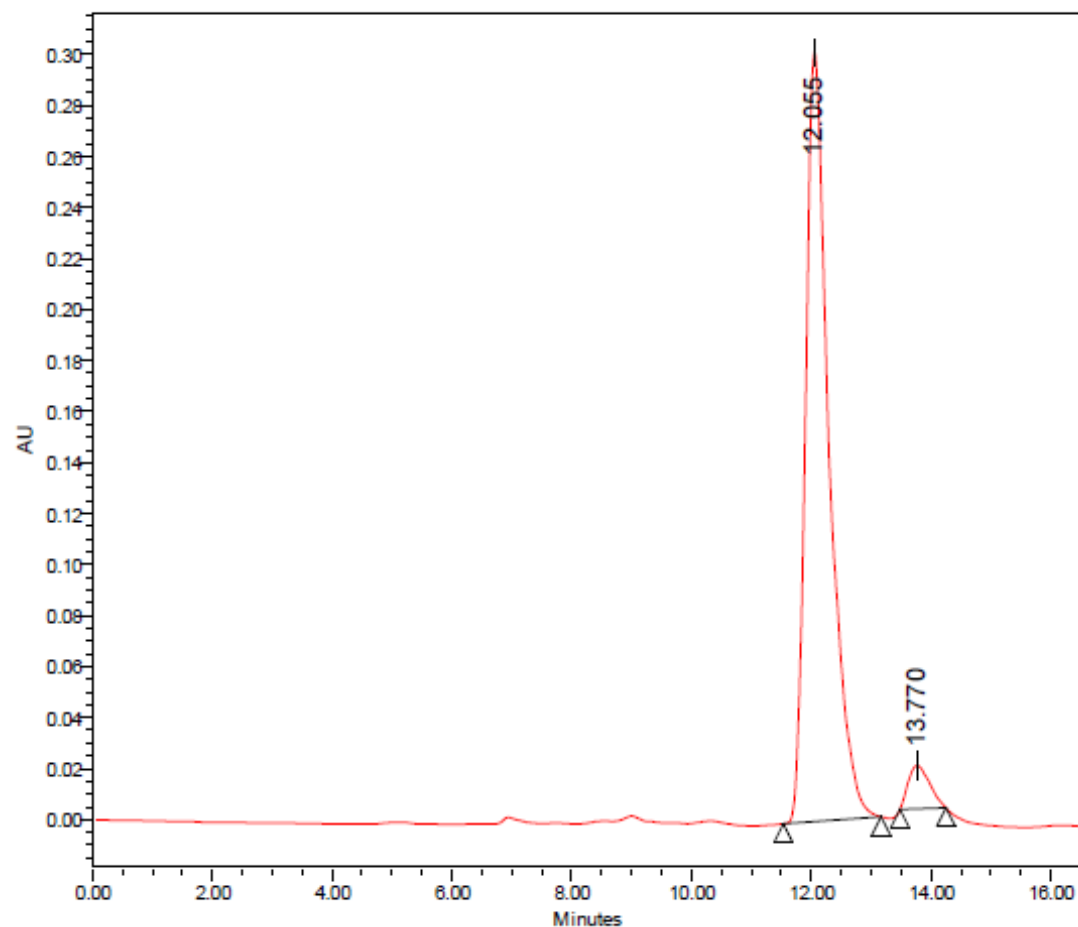
Sample Name: SB 779 REP HEXIPA8020-ODHFR=1; Date Acquired: 07-06-2023
 15:51:00 IST; Vial: 1; Injection: 4



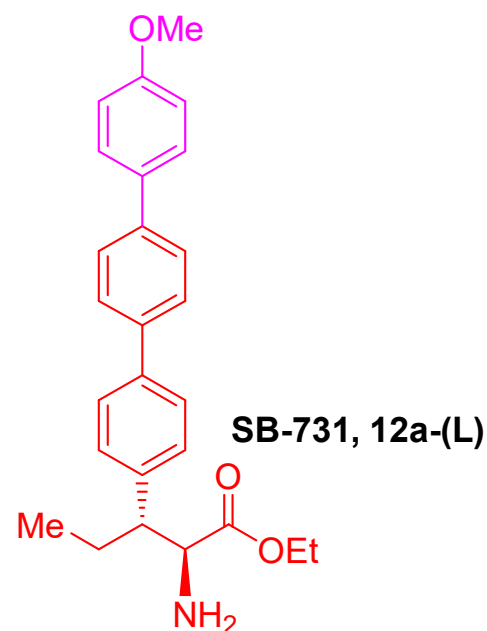
Peak Summary with Statistics
 Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 779 REP HEXIPA8020-ODHFR=1	1	4	14.178	13095826	95.03	359334
2	SB 779 REP HEXIPA8020-ODHFR=1	1	4	12.150	684838	4.97	28962
Mean				13.164			
Std. Dev.				1.434			

The enantiomeric ratio ($er = 95:5$) of the compound **12a-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 291.7 nm, $t_L = 12.15$ min, $t_D = 14.17$ min.



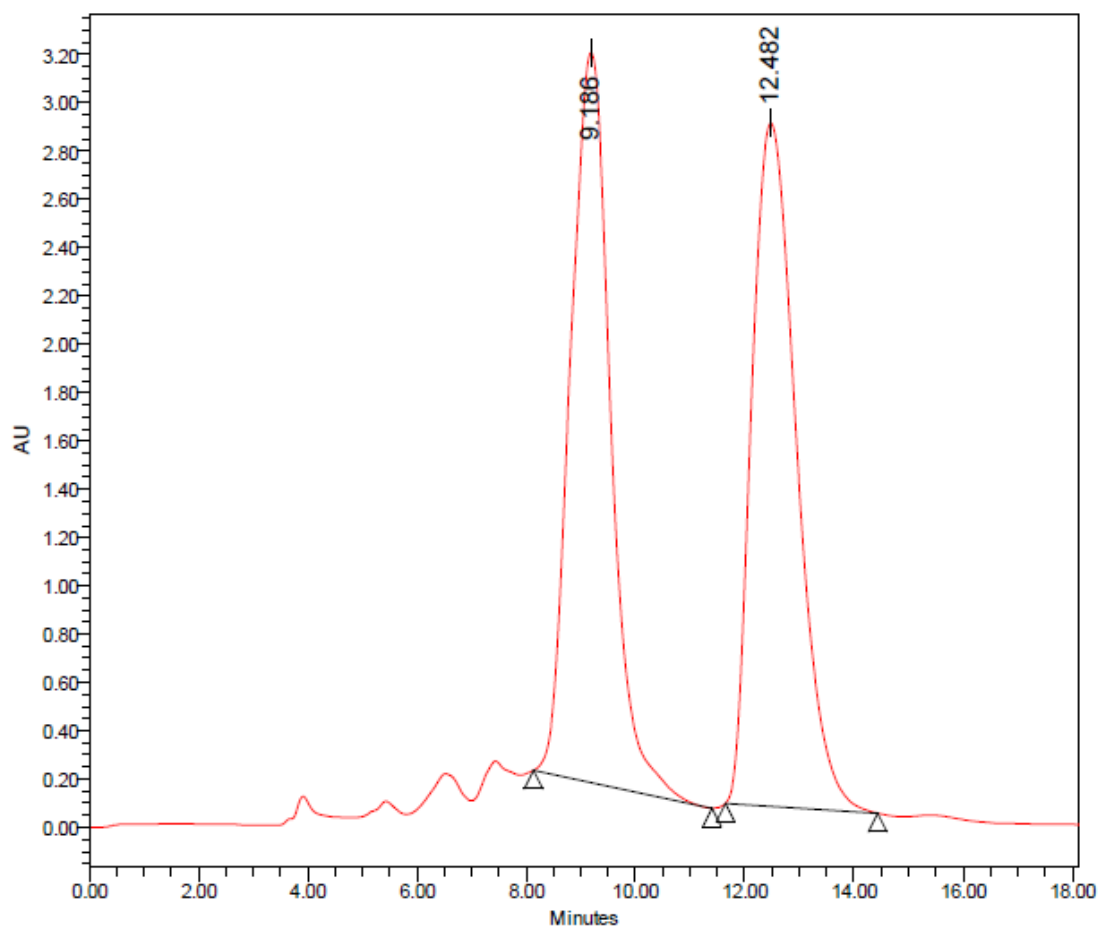
Sample Name: SB 731 REP4 HEXIPA8020-ODHFR=1; Date Acquired: 07-06-2023 17:15:34 IST; Vial: 1; Injection: 8



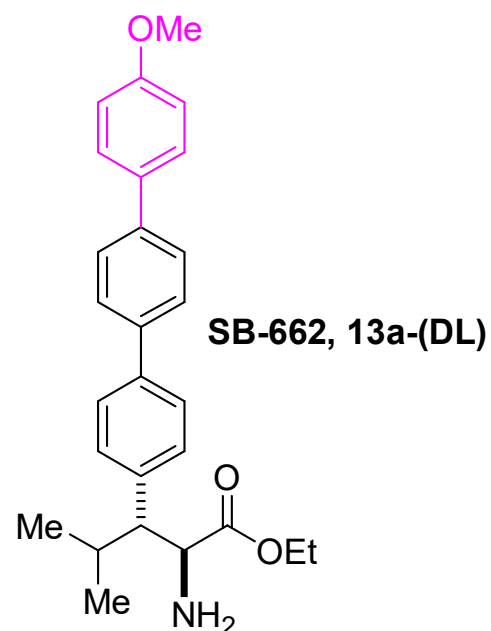
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 731 REP4 HEXIPA8020-ODHFR=1	1	8	13.770	420634	4.85	17077
2	SB 731 REP4 HEXIPA8020-ODHFR=1	1	8	12.055	8249352	95.15	301928
Mean				12.913			
Std. Dev.				1.213			

The enantiomeric ratio ($er = 95:5$) of the compound **12a-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 291.7 nm, $t_L = 12.05$ min, $t_D = 13.77$ min.



Sample Name: SB 662 REP12 HEXIPA8020 ODH FR1; Date Acquired: 22-05-2022 23:53:36 IST; Vial: 1; Injection: 11

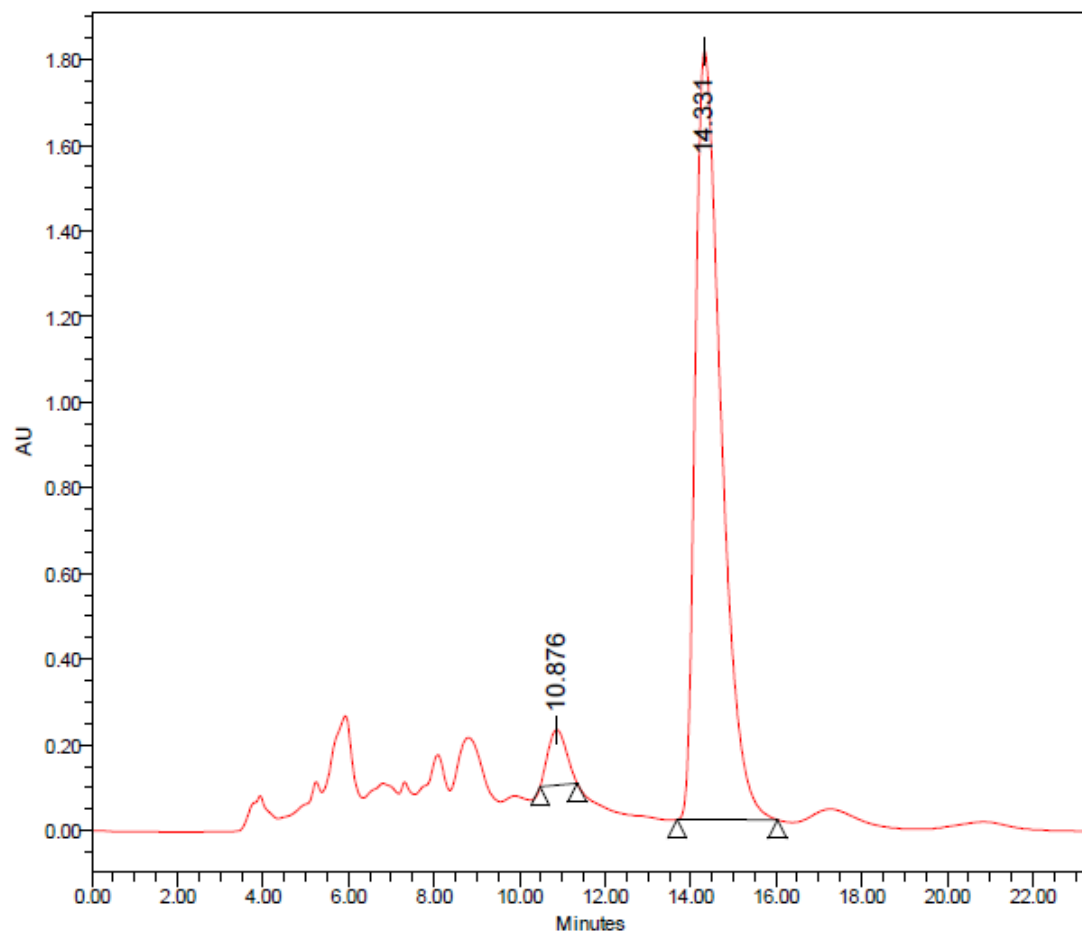


Peak Summary with Statistics

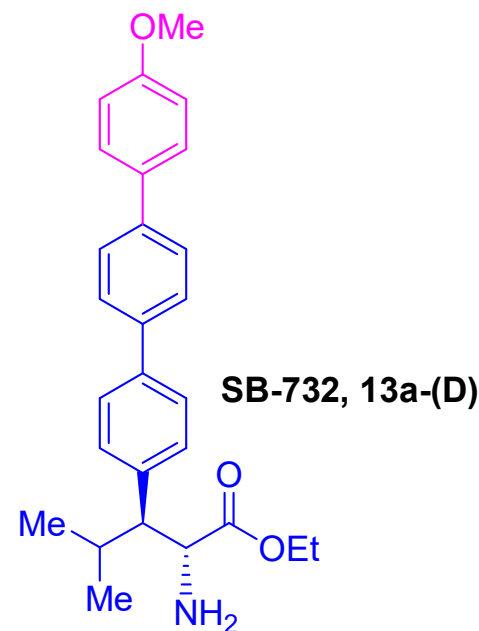
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 662 REP12 HEXIPA8020 ODH FR1	1	11	12.482	160737946	50.98	2829524
2	SB 662 REP12 HEXIPA8020 ODH FR1	1	11	9.186	154540312	49.02	3022864
Mean				10.834			
Std. Dev.				2.331			

The HPLC of the compound **13a-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 9.18$ min, $t_D = 12.48$ min.



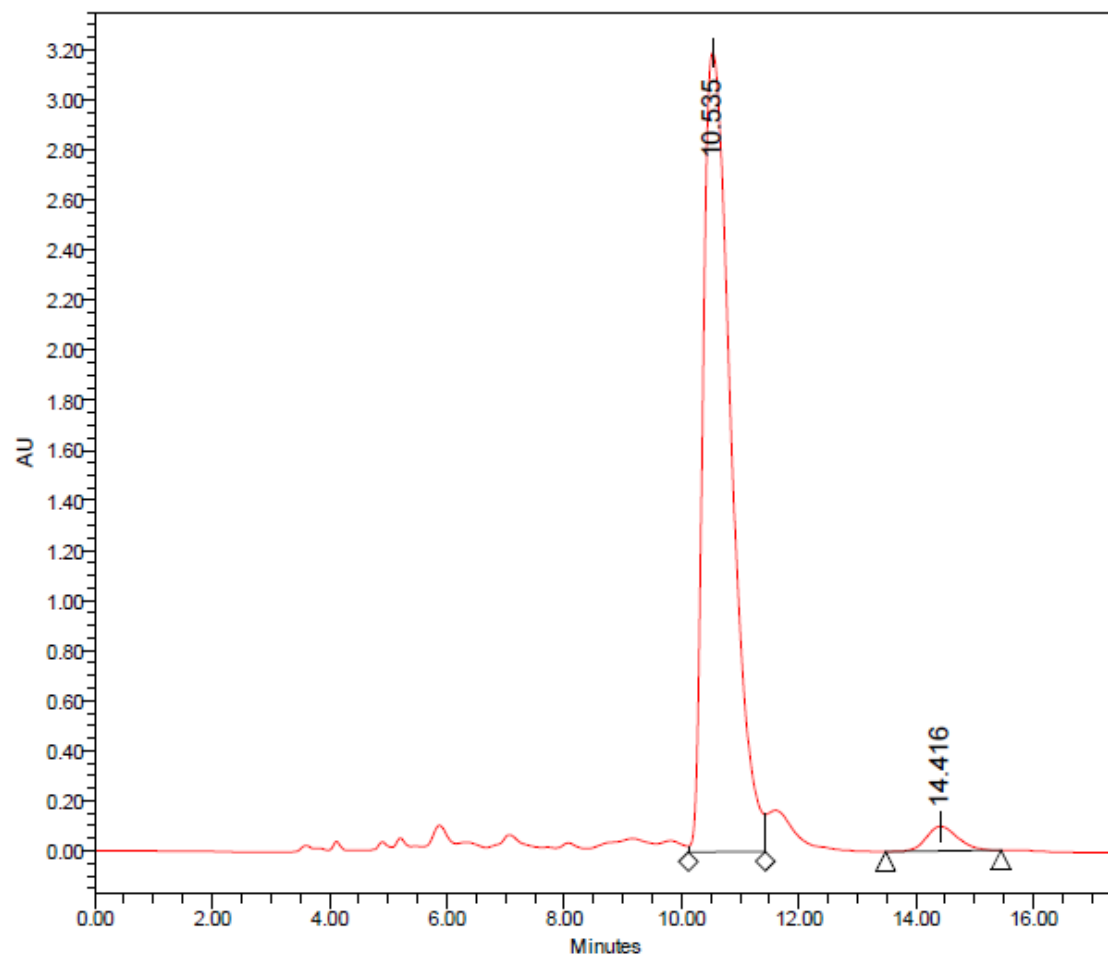
Sample Name: SB 732 REP9 HEXIPA8020 ODH FR1; Date Acquired: 22-05-2022 22:23:36 IST; Vial: 1; Injection: 7



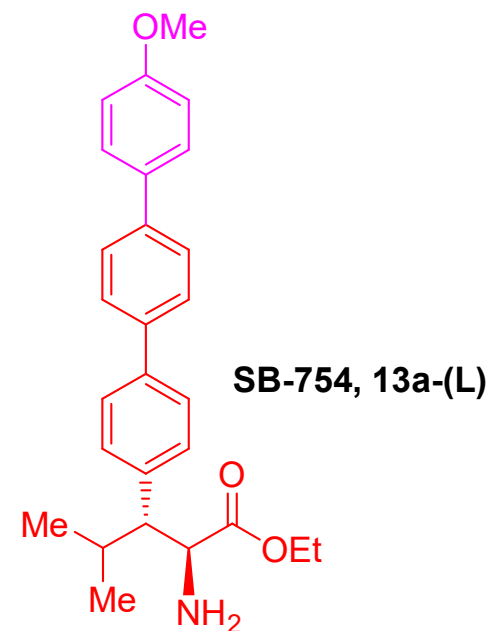
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 732 REP9 HEXIPA8020 ODH FR1	1	7	14.331	75530561	95.21	1793245
2	SB 732 REP9 HEXIPA8020 ODH FR1	1	7	10.876	3796939	4.79	129660
Mean				12.603			
Std. Dev.				2.443			

The enantiomeric ratio ($er = 95:5$) of the compound **13a-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 10.87$ min, $t_D = 14.33$ min.



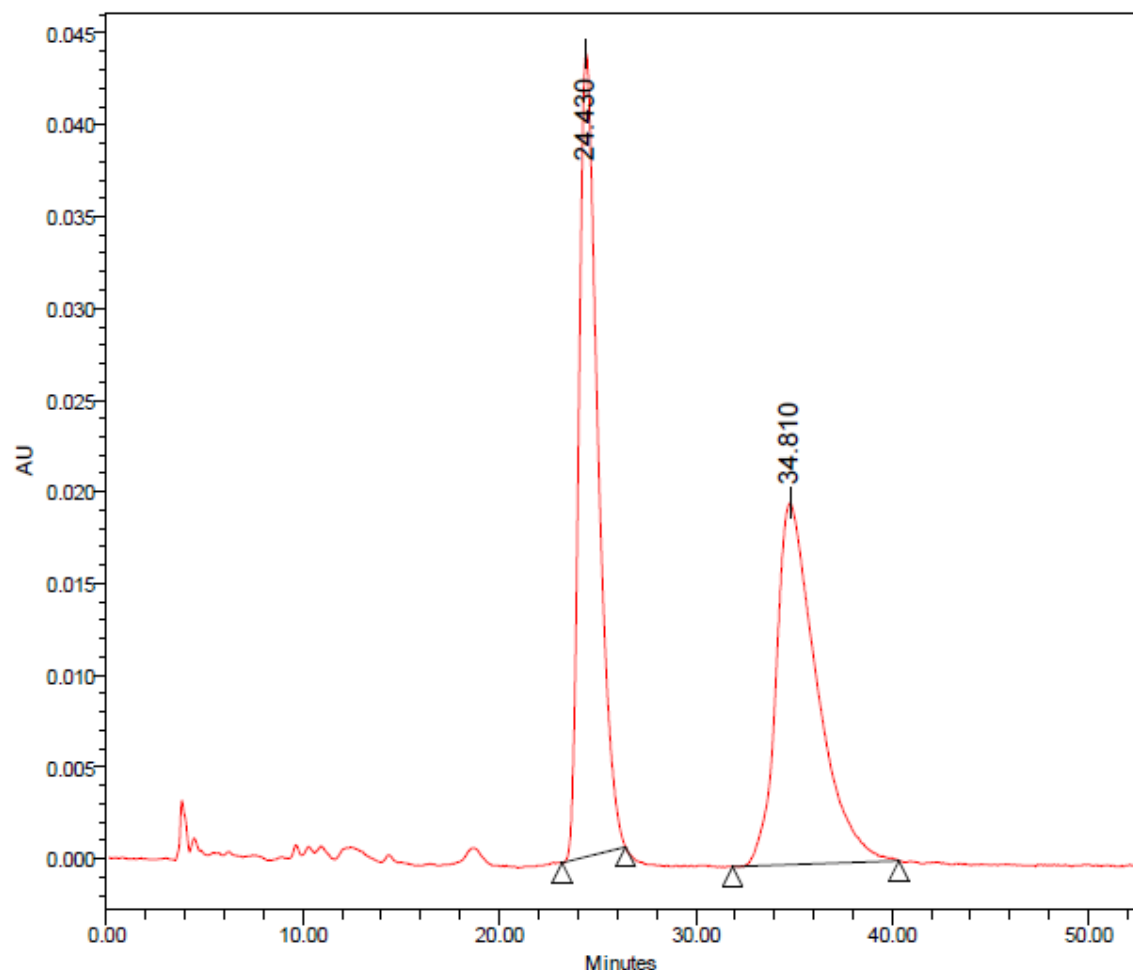
Sample Name: SB 754 REP9 HEXIPA8020 ODH FR1; Date Acquired: 22-05-2022 22:05:51 IST; Vial: 1; Injection: 6



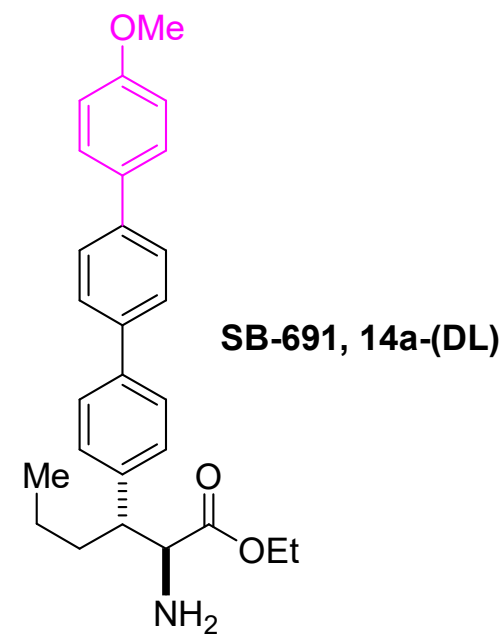
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 754 REP9 HEXIPA8020 ODH FR1	1	6	14.416	3677791	3.37	98274
2	SB 754 REP9 HEXIPA8020 ODH FR1	1	6	10.535	105565408	96.63	3193680
Mean				12.476			
Std. Dev.				2.744			

The enantiomeric ratio ($er = 96:4$) of the compound **13a-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 10.53$ min, $t_D = 14.41$ min.



Sample Name: SB691 rep HEX IPA 9505 ODH FR1; Date Acquired: 03-06-2022
22:01:41 IST; Vial: 1; Injection: 2

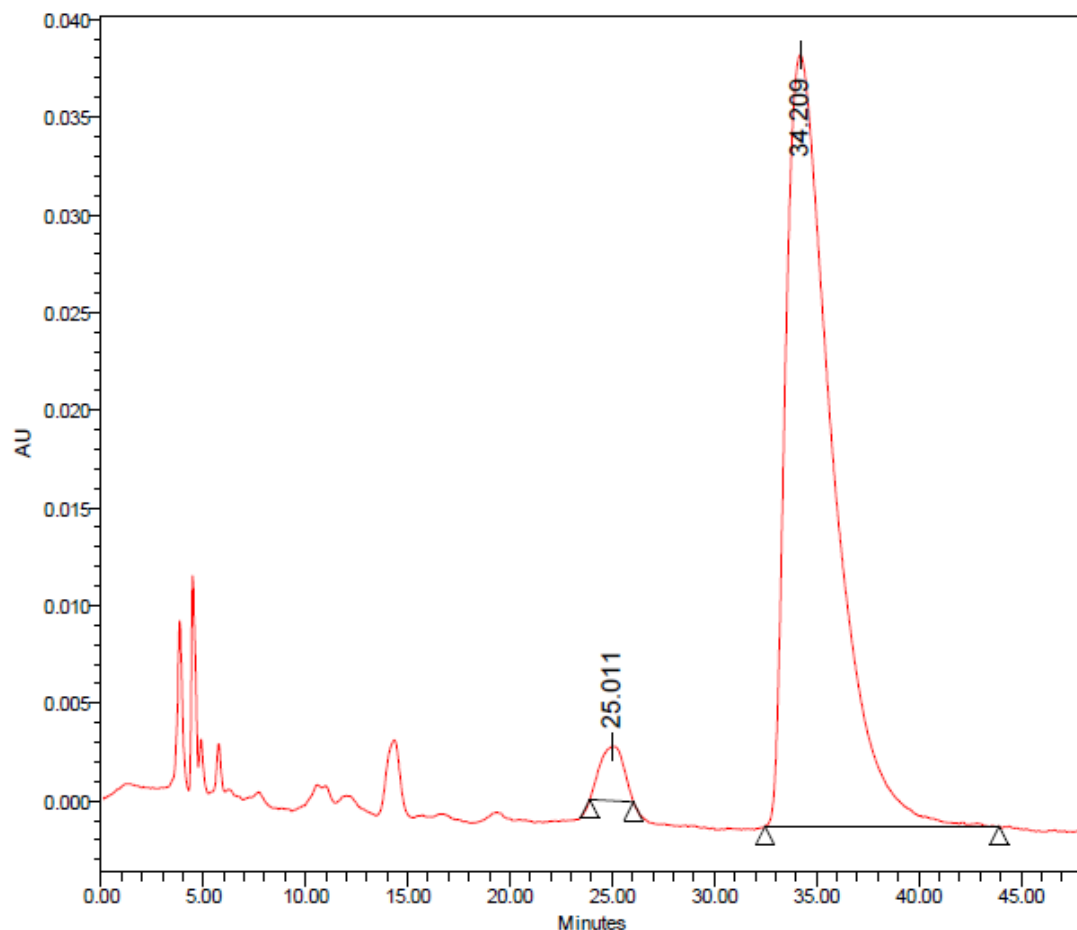


Peak Summary with Statistics

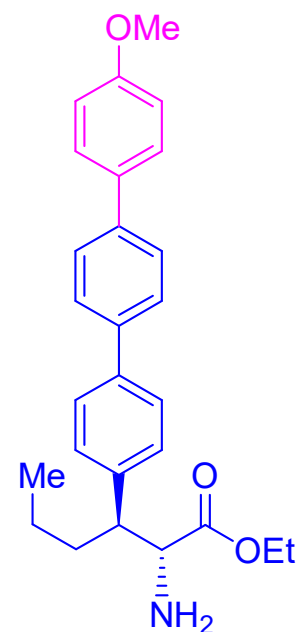
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB691 rep HEX IPA 9505 ODH FR1	1	2	34.810	2830327	49.00	19707
2	SB691 rep HEX IPA 9505 ODH FR1	1	2	24.430	2946099	51.00	43785
Mean				29.620			
Std. Dev.				7.340			

The HPLC of the compound **14a-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 24.43$ min, $t_D = 34.81$ min.



Sample Name: SB780 rep3 HEX IPA 9505 ODH FR1; Date Acquired: 03-06-2022
23:41:59 IST; Vial: 1; Injection: 4



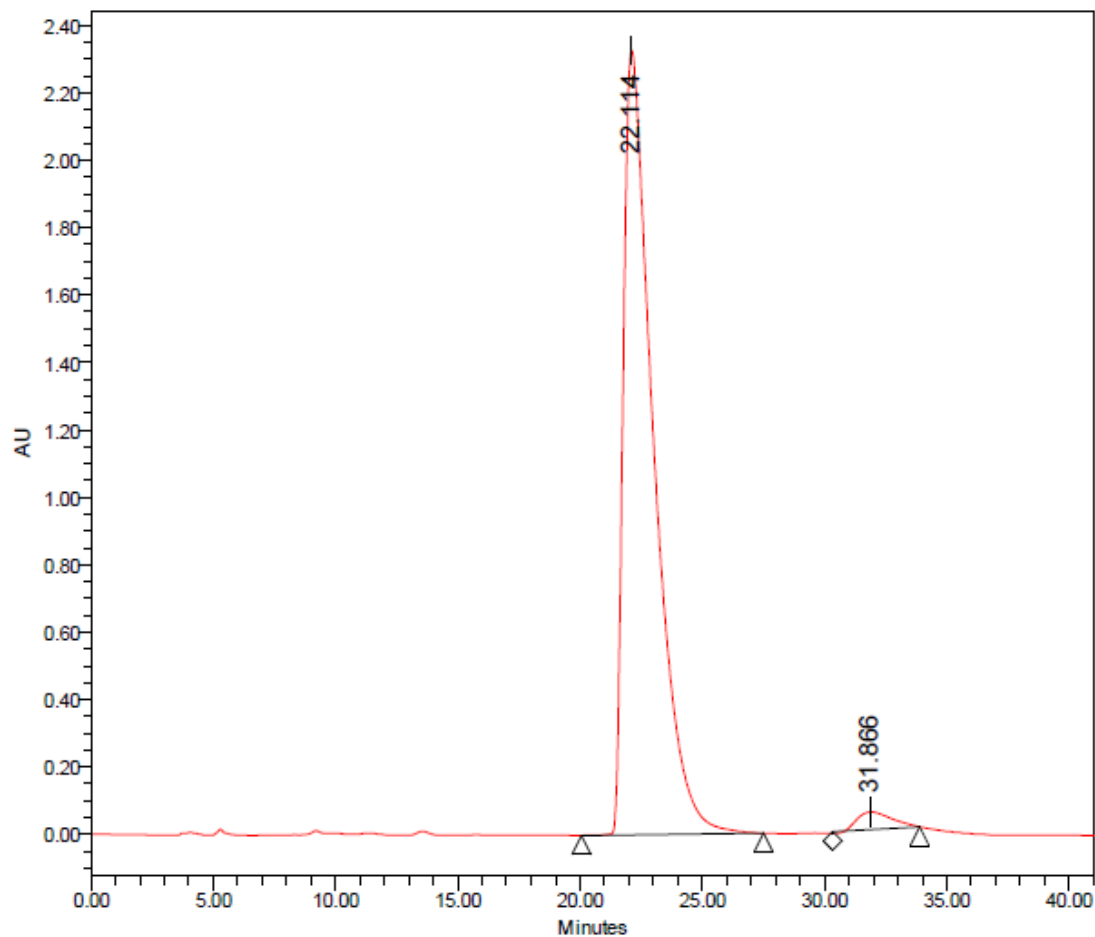
SB-780, 14a-(D)

Peak Summary with Statistics

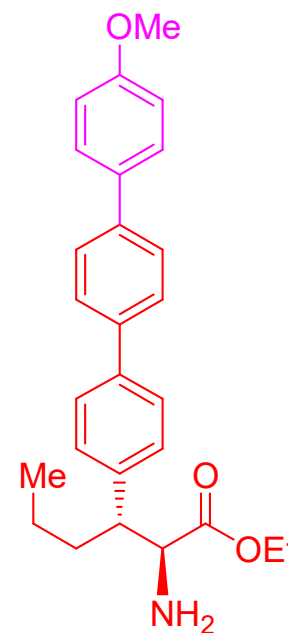
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB780 rep3 HEX IPA 9505 ODH FR1	1	4	34.209	6232058	96.55	39478
2	SB780 rep3 HEX IPA 9505 ODH FR1	1	4	25.011	222846	3.45	2784
Mean				29.610			
Std. Dev.				6.504			

The enantiomeric ratio ($er = 96:4$) of the compound **14a-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 25.01$ min, $t_D = 34.20$ min.



Sample Name: SB 876 HEX IPA 9505 ODH FR1; Date Acquired: 03-06-2022
19:55:46 IST; Vial: 1; Injection: 5

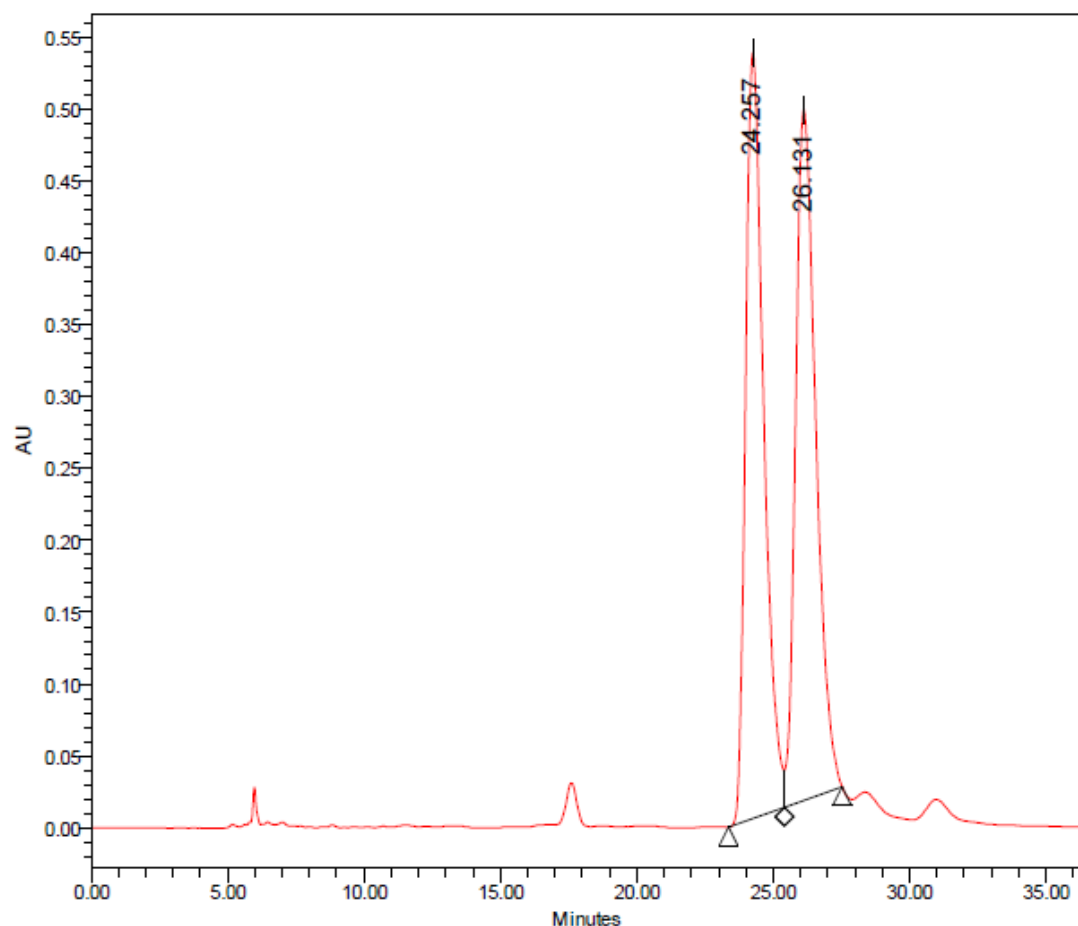


SB-876, 14a-(L)

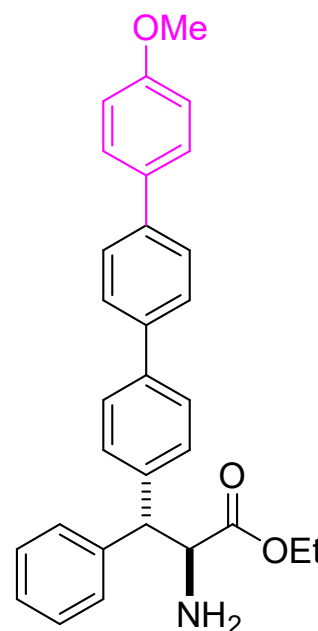
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 876 HEX IPA 9505 ODH FR1	1	5	31.866	5216186	2.54	51906
2	SB 876 HEX IPA 9505 ODH FR1	1	5	22.114	199908106	97.46	2327924
Mean				26.990			
Std. Dev.				6.896			

The enantiomeric ratio ($er = 97:3$) of the compound **14a-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (95:05), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 22.11$ min, $t_D = 31.86$ min.



Sample Name: SB549 REP RHEX IPA 8515 IA FR1; Date Acquired: 19-01-2023
17:27:20 IST; Vial: 1; Injection: 10

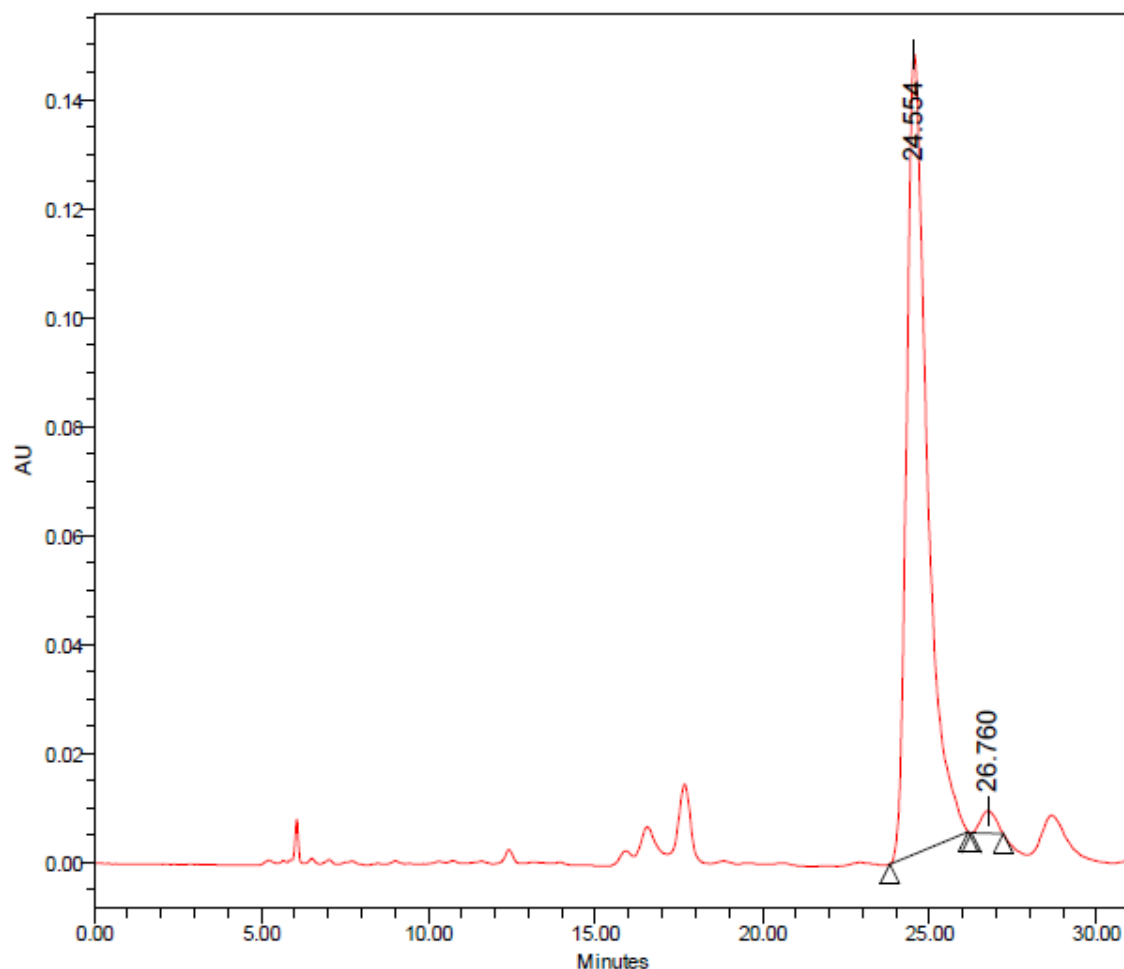


SB-549, 15a-(DL)

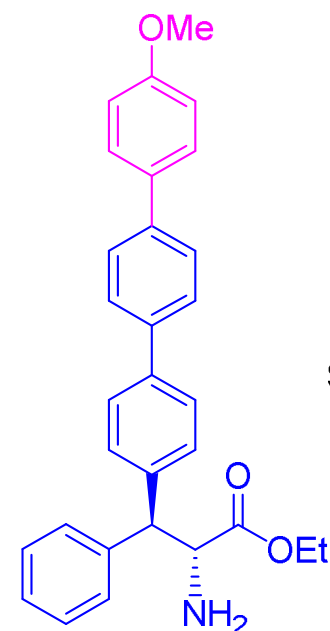
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB549 REP RHEX IPA 8515 IA FR1	1	10	26.131	24786858	49.97	480561
2	SB549 REP RHEX IPA 8515 IA FR1	1	10	24.257	24820418	50.03	532984
Mean				25.194			
Std. Dev.				1.325			

The HPLC of the compound **15a-(DL)** was determined using the Daicel Chiralpak IA column, hexane/*i*-PrOH (85:15), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 24.25$ min, $t_D = 26.13$ min.



Sample Name: SB902 REPHEX IPA 8515 IA FR1; Date Acquired: 19-01-2023
16:05:04 IST; Vial: 1; Injection: 6



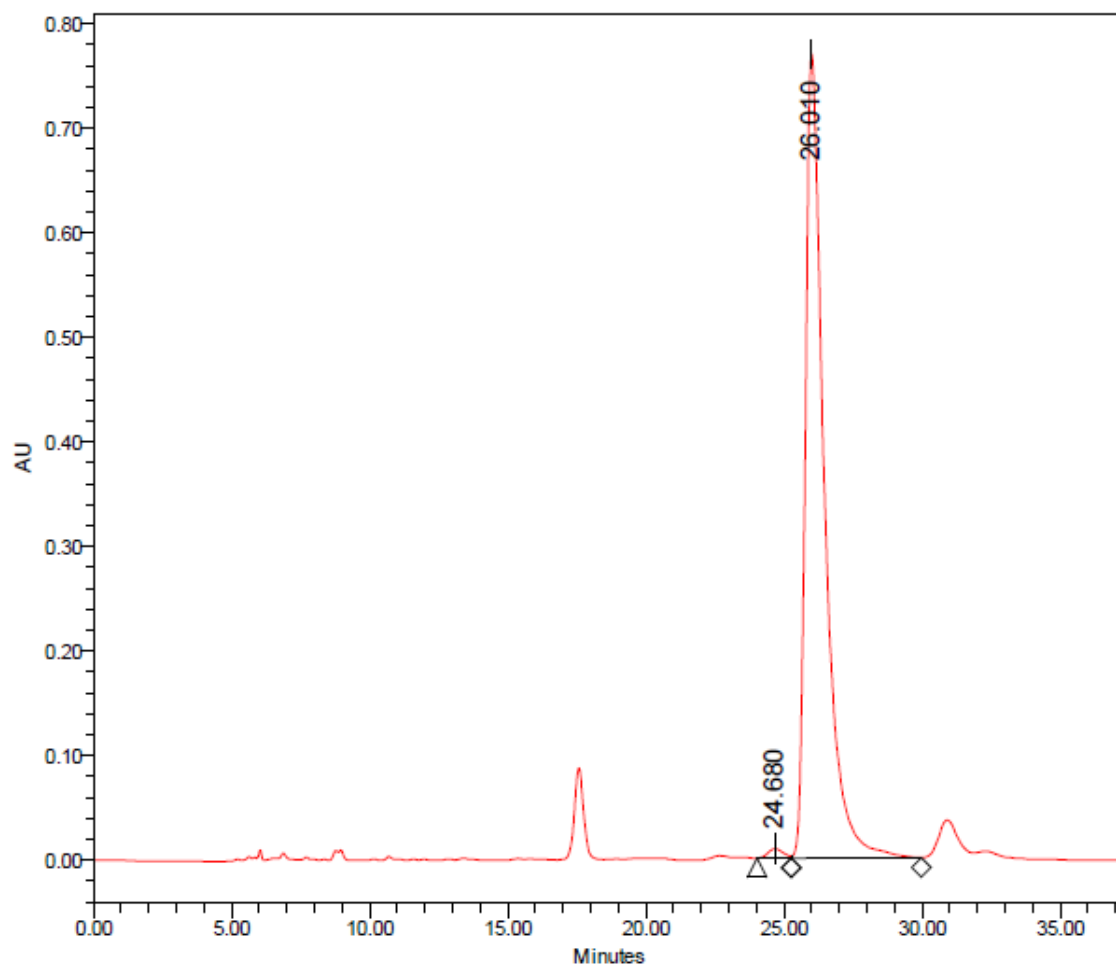
SB-902, 15a-(D)

Peak Summary with Statistics

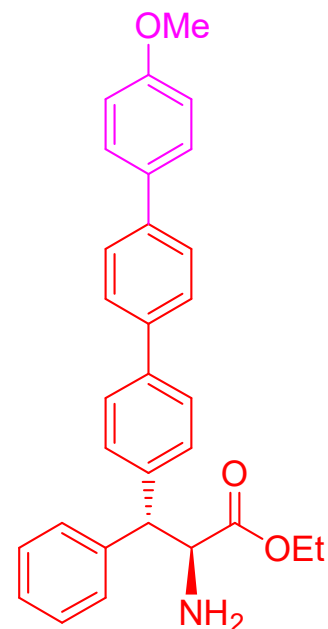
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB902 REPHEX IPA 8515 IA FR1	1	6	26.760	128632	2.00	4148
2	SB902 REPHEX IPA 8515 IA FR1	1	6	24.554	6300191	98.00	146783
Mean				25.657			
Std. Dev.				1.559			

The enantiomeric ratio ($er = 98:2$) of the compound **15a-(D)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (85:15), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 24.55$ min, $t_L = 26.76$ min.



Sample Name: SB493 REPHEX IPA 8515 IA FR1; Date Acquired: 19-01-2023
16:46:24 IST; Vial: 1; Injection: 7

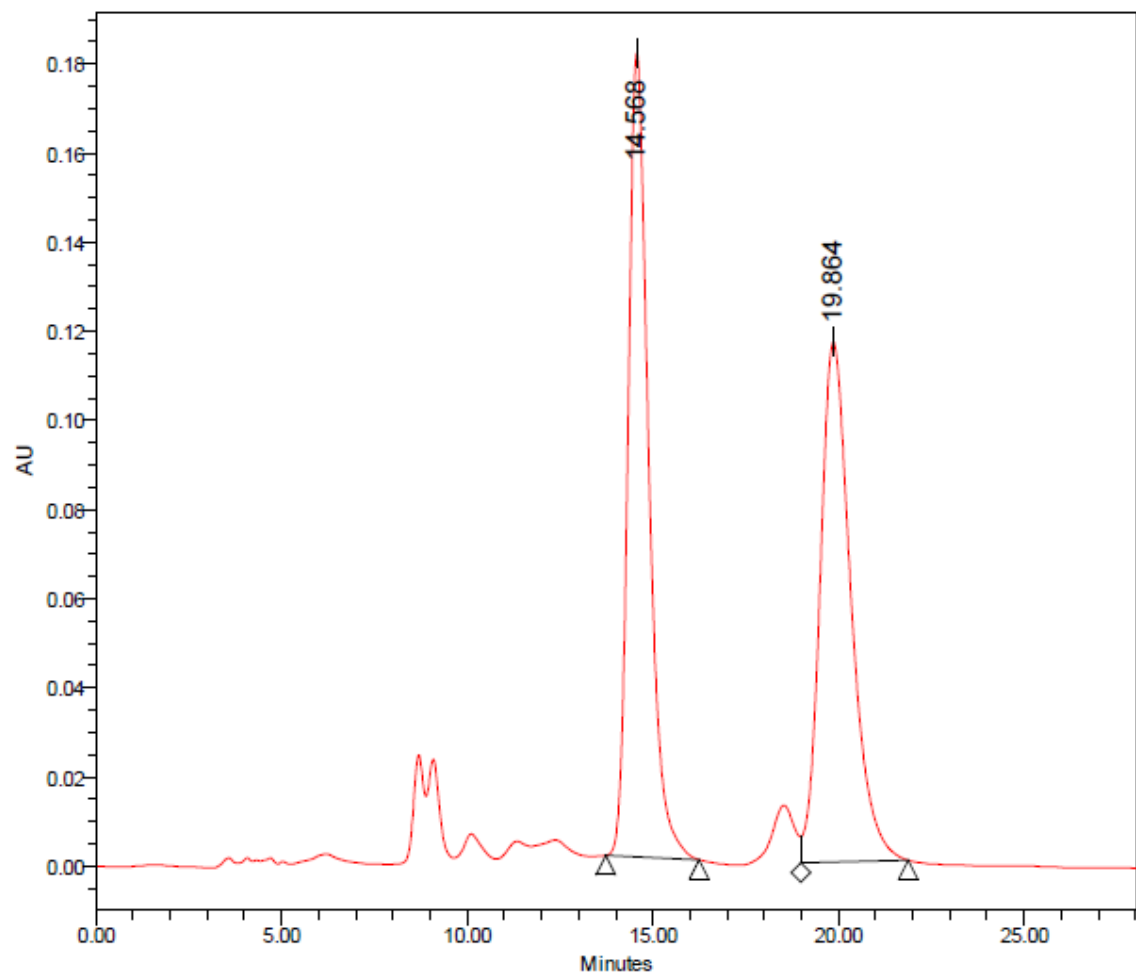


SB-493, 15a-(L)

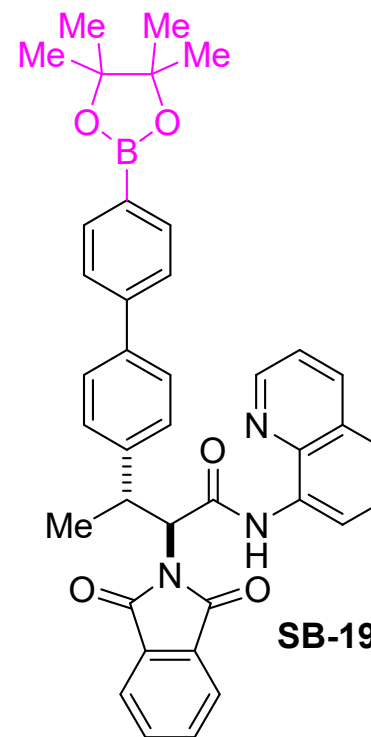
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB493 REPHEX IPA 8515 IA FR1	1	7	26.010	36578196	99.09	769149
2	SB493 REPHEX IPA 8515 IA FR1	1	7	24.680	337602	0.91	8910
Mean				25.345			
Std. Dev.				0.940			

The enantiomeric ratio ($er = 99:1$) of the compound **15a-(L)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (85:15), flow rate 1.0 mL/min, UV detection at 254 nm, $t_D = 24.68$ min, $t_L = 26.01$ min.



Sample Name: SB 1921 rep3 HEX IPA4060 ia FR1; Date Acquired: 26-06-2024
19:59:30 IST; Vial: 1; Injection: 4



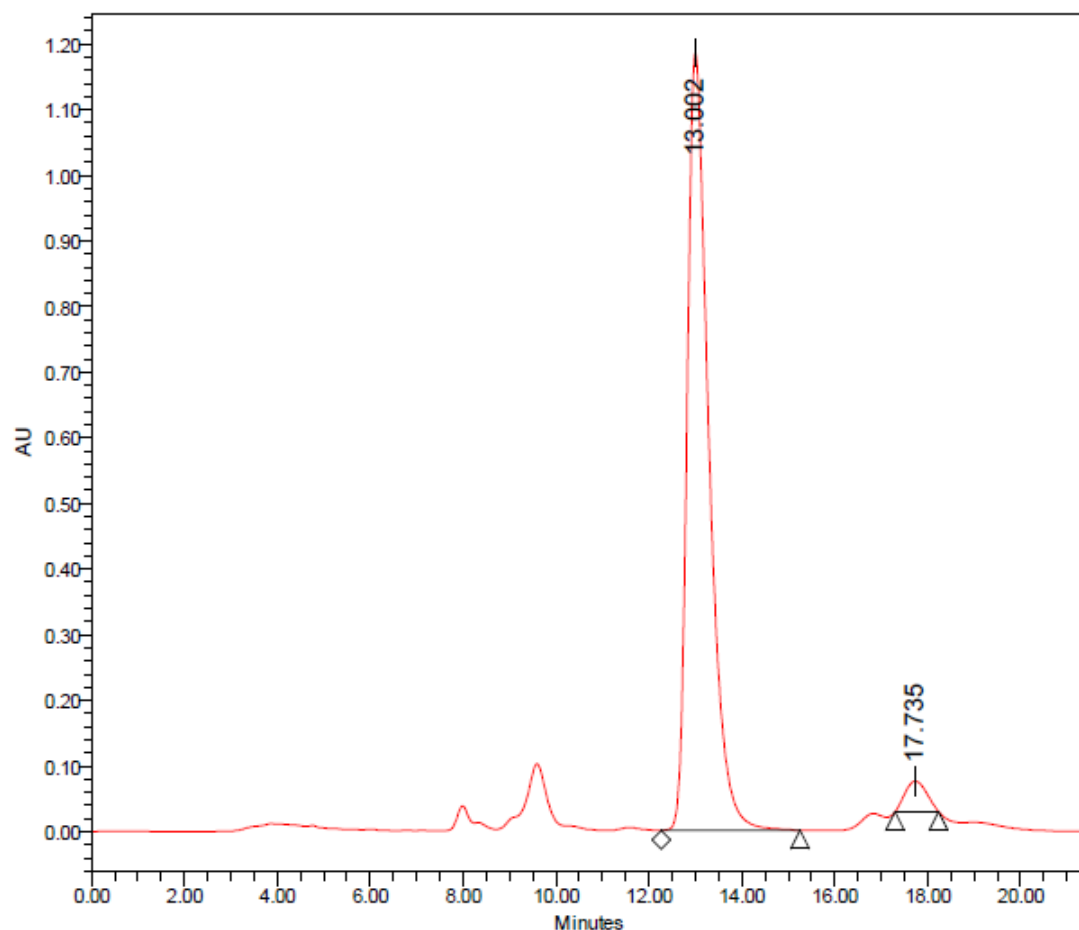
SB-1921, 21a-(DL)

Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 1921 rep3 HEX IPA4060 ia FR1	1	4	19.864	6732862	49.42	116710
2	SB 1921 rep3 HEX IPA4060 ia FR1	1	4	14.568	6890632	50.58	180360
Mean				17.216			
Std. Dev.				3.745			

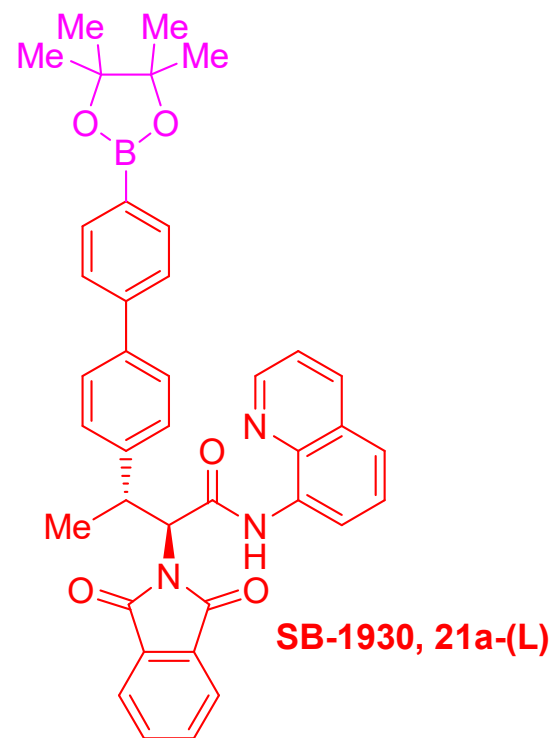
The HPLC of the compound **21a-(DL)** was determined using the Daicel Chiralpak IA column, hexane/*i*-PrOH (40:60), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 14.56$ min, $t_D = 19.86$ min.



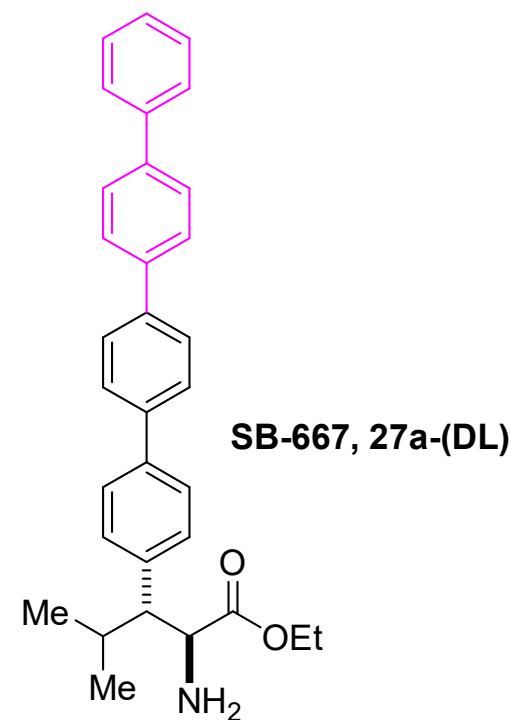
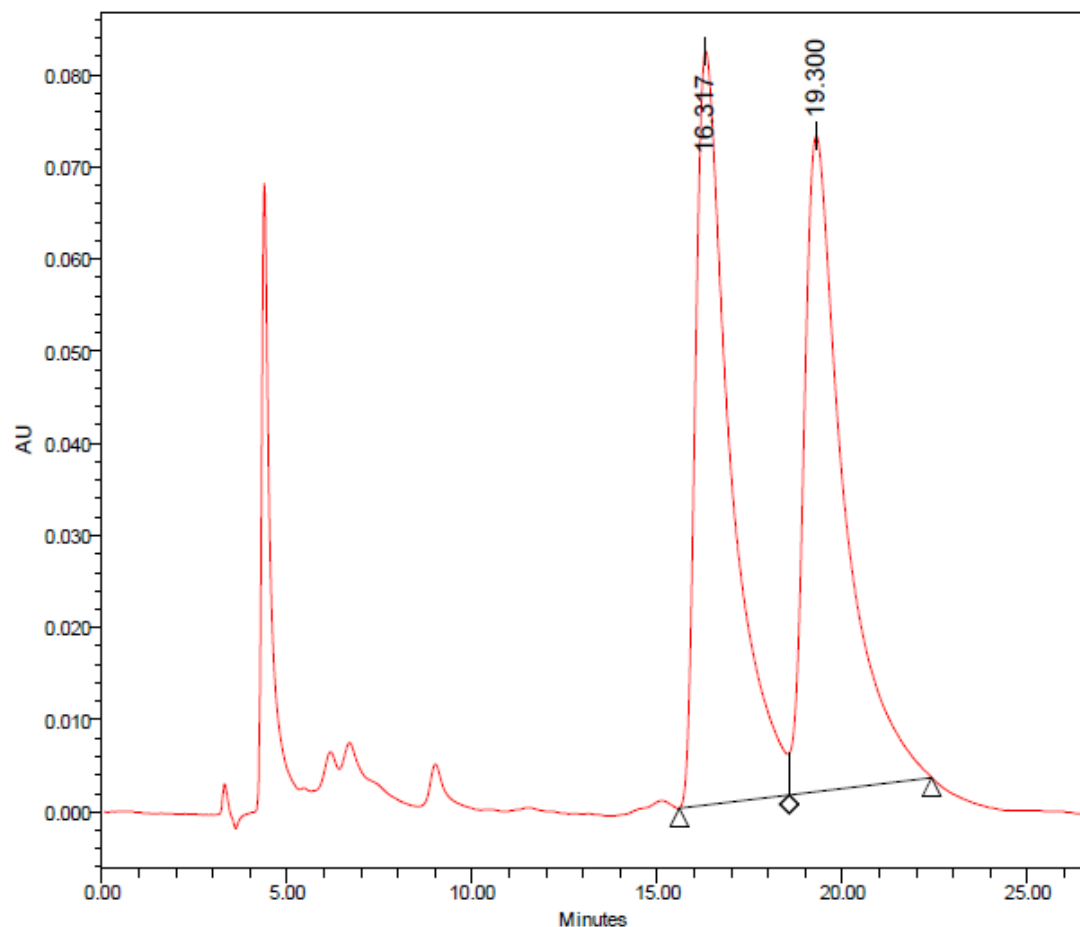
Sample Name: SB 1930 HEX IPA4060 IA FR1; Date Acquired: 25-06-2024
 19:39:32 IST; Vial: 1; Injection: 2

Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 1930 HEX IPA4060 IA FR1	1	2	17.735	1482307	3.72	46311
2	SB 1930 HEX IPA4060 IA FR1	1	2	13.002	38366261	96.28	1184999
Mean				15.368			
Std. Dev.				3.347			



The enantiomeric ratio ($er = 96:4$) of the compound **21a-(L)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (40:60), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 13.00$ min, $t_D = 17.73$ min.

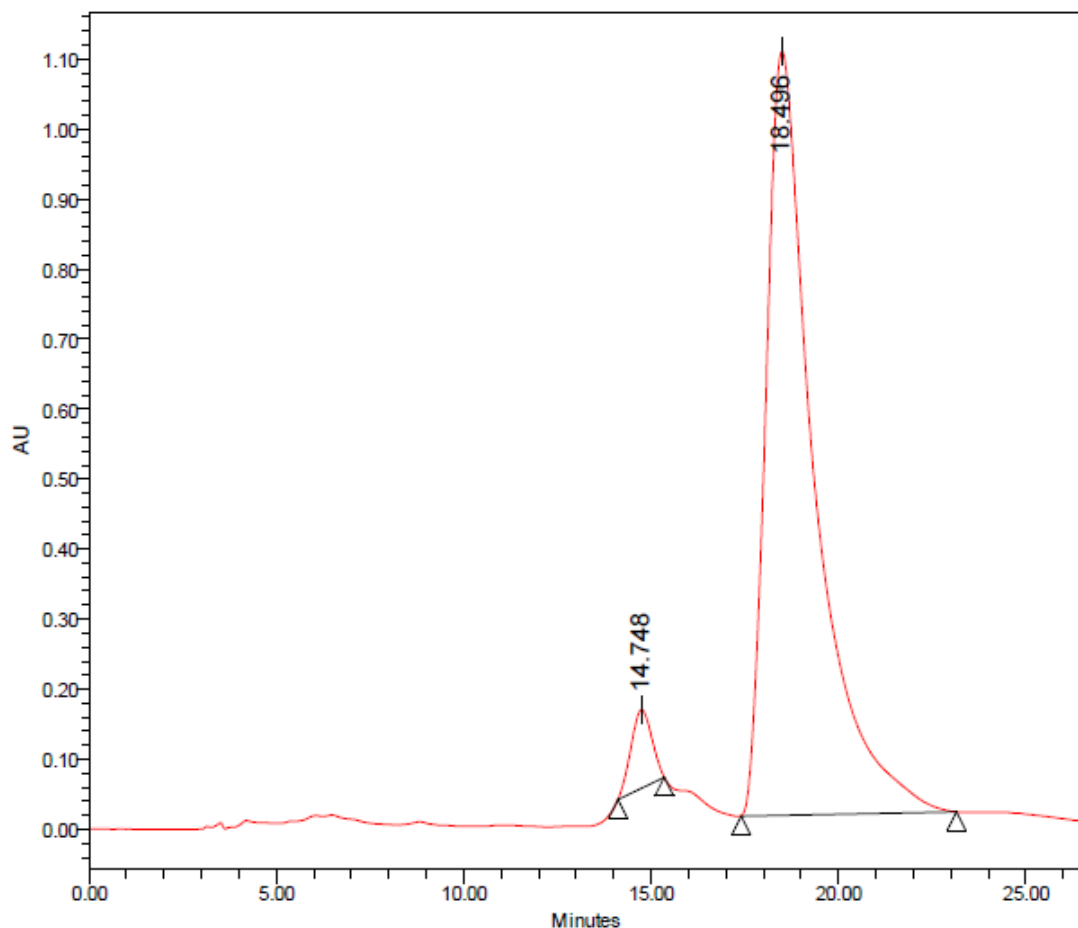


Peak Summary with Statistics

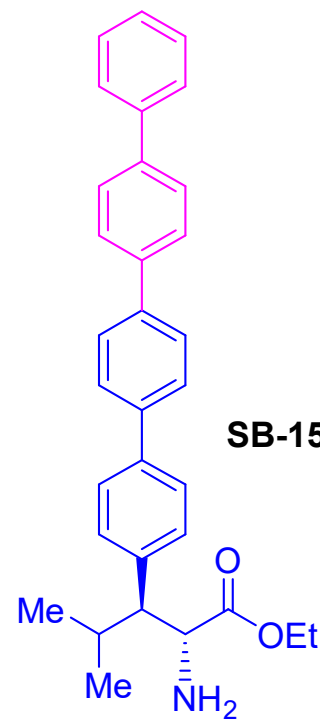
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 667 hex ipa 8020ic fr1	1	2	19.300	5316438	49.83	71212
2	sb 667 hex ipa 8020ic fr1	1	2	16.317	5352840	50.17	81833
Mean				17.808			
Std. Dev.				2.110			

The HPLC of the compound **27a-(DL)** was determined using the Daicel Chiralpak IC column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 326.3 nm, $t_L = 16.31$ min, $t_D = 19.30$ min.



Sample Name: sb 1583hex ipa 8020ic fr1; Date Acquired: 21-08-2023 22:23:32
 IST; Vial: 1; Injection: 3

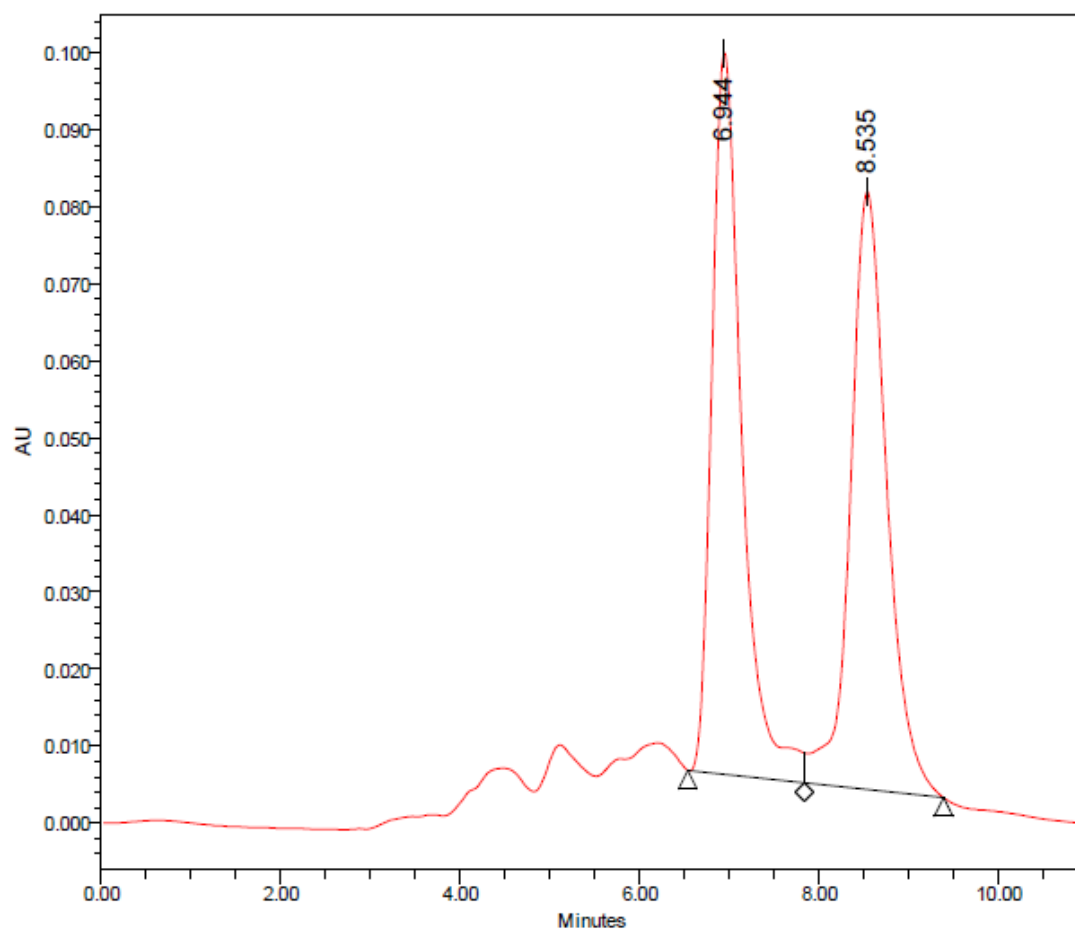


SB-1583, 27a-(D)

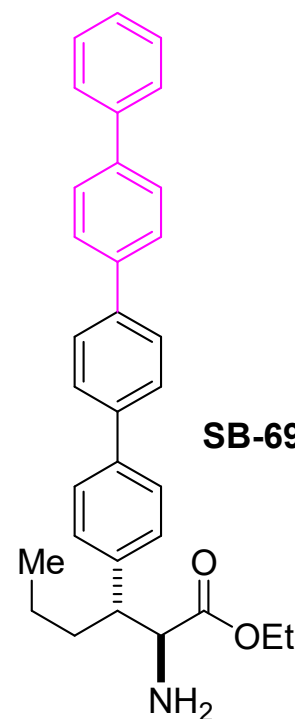
Peak Summary with Statistics
 Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1583hex ipa 8020ic fr1	1	3	18.496	97639915	95.77	1091106
2	sb 1583hex ipa 8020ic fr1	1	3	14.748	4307856	4.23	112150
Mean				16.622			
Std. Dev.				2.650			

The enantiomeric ratio ($er = 96:4$) of the compound **27a-(D)** was determined by HPLC using the Daicel Chiralpak IC column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 326.3 nm, $t_L = 14.74$ min, $t_D = 18.49$ min.



Sample Name: SB 692 HEX IPA 5050 ODH FR1; Date Acquired: 26-06-2024
18:24:03 IST; Vial: 1; Injection: 5

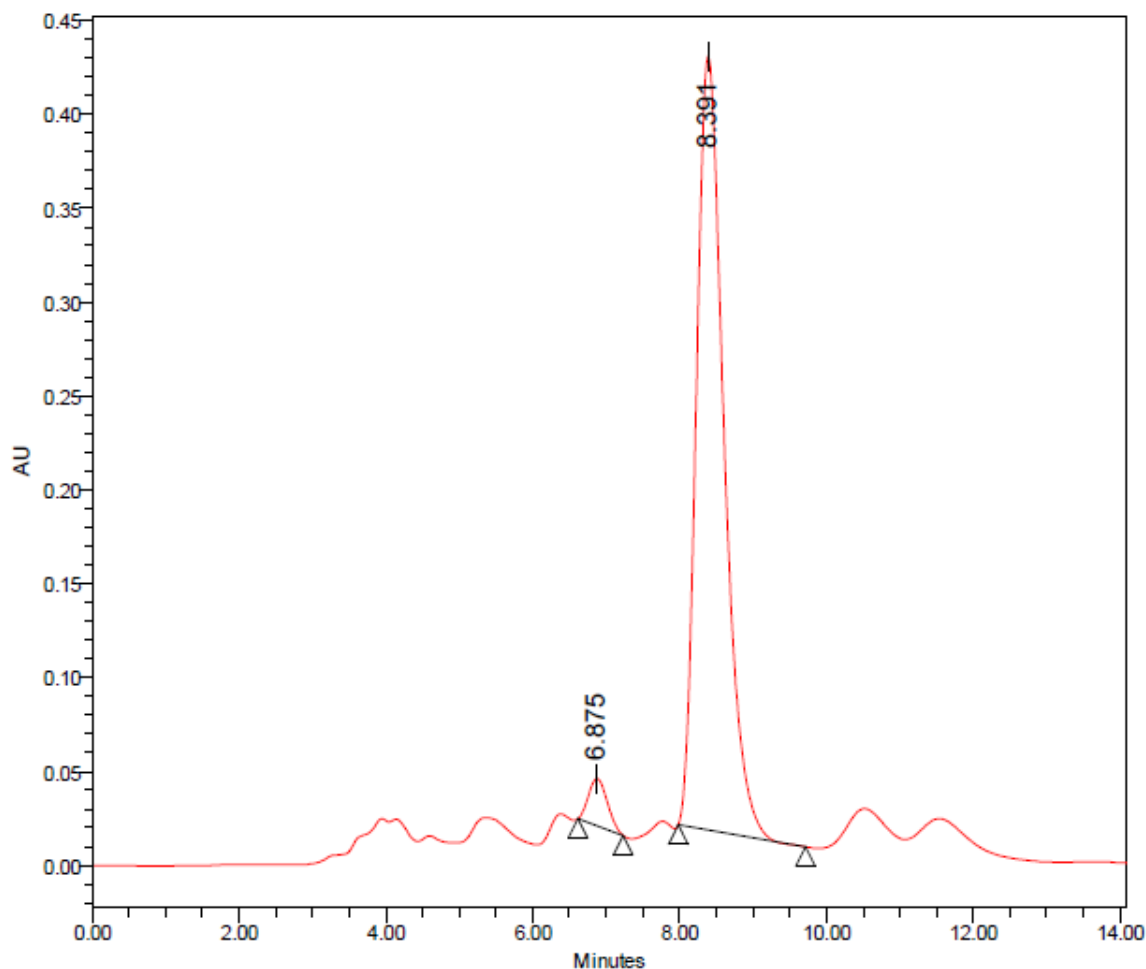


SB-692, 28b-(DL)

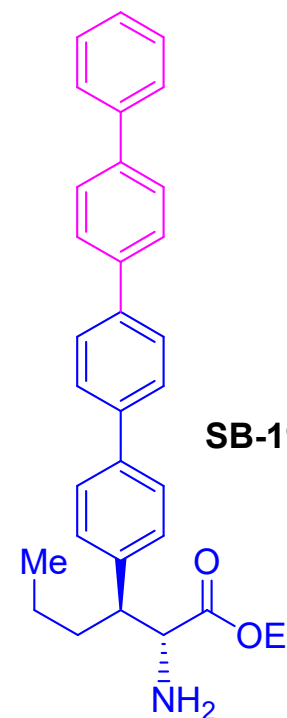
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 692 HEX IPA 5050 ODH FR1	1	5	6.944	2175719	49.64	93683
2	SB 692 HEX IPA 5050 ODH FR1	1	5	8.535	2207134	50.36	77678
Mean				7.739			
Std. Dev.				1.126			

The HPLC of the compound **28b-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 291.9 nm, $t_L = 6.94$ min, $t_D = 8.53$ min.



Sample Name: SB 1913 HEX IPA 5050 ODH FR1; Date Acquired: 26-06-2024
18:57:40 IST; Vial: 1; Injection: 7



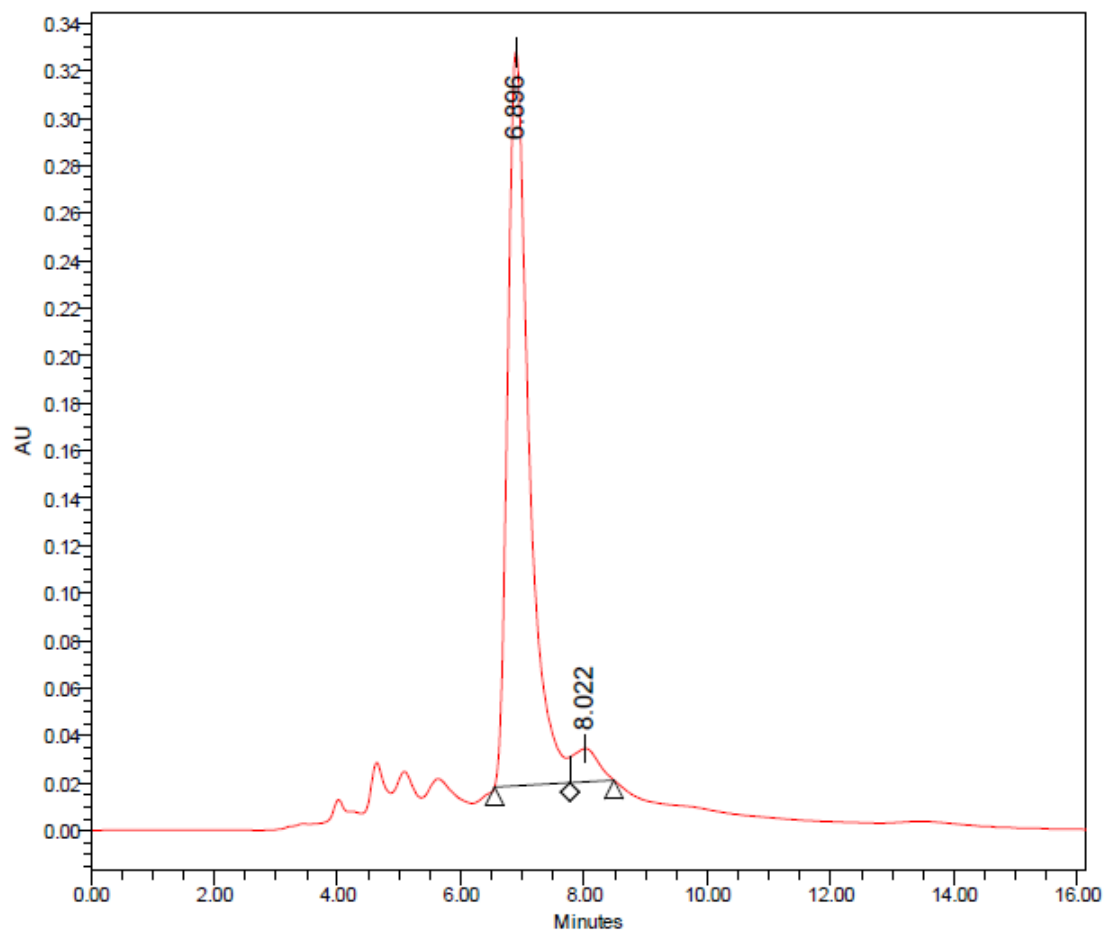
SB-1913, 28b-(D)

Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 1913 HEX IPA 5050 ODH FR1	1	7	8.391	10752992	96.00	412334
2	SB 1913 HEX IPA 5050 ODH FR1	1	7	6.875	448430	4.00	25130
Mean				7.633			
Std. Dev.				1.072			

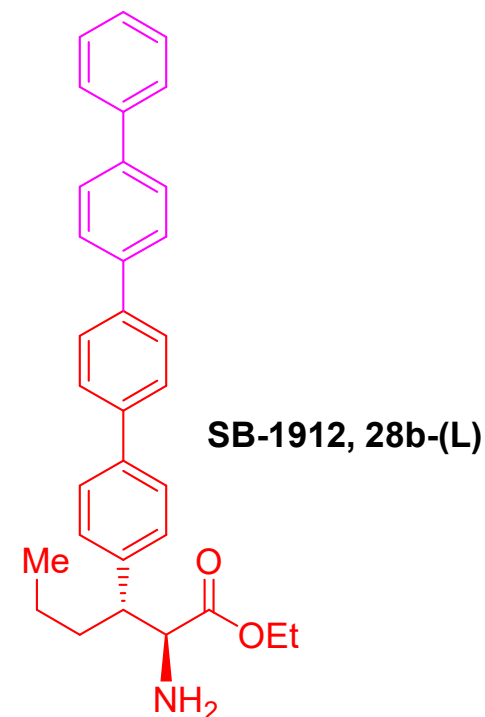
The enantiomeric ratio ($er = 96:4$) of the compound **28b-(D)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 291.9 nm, $t_L = 6.87$ min, $t_D = 8.39$ min.



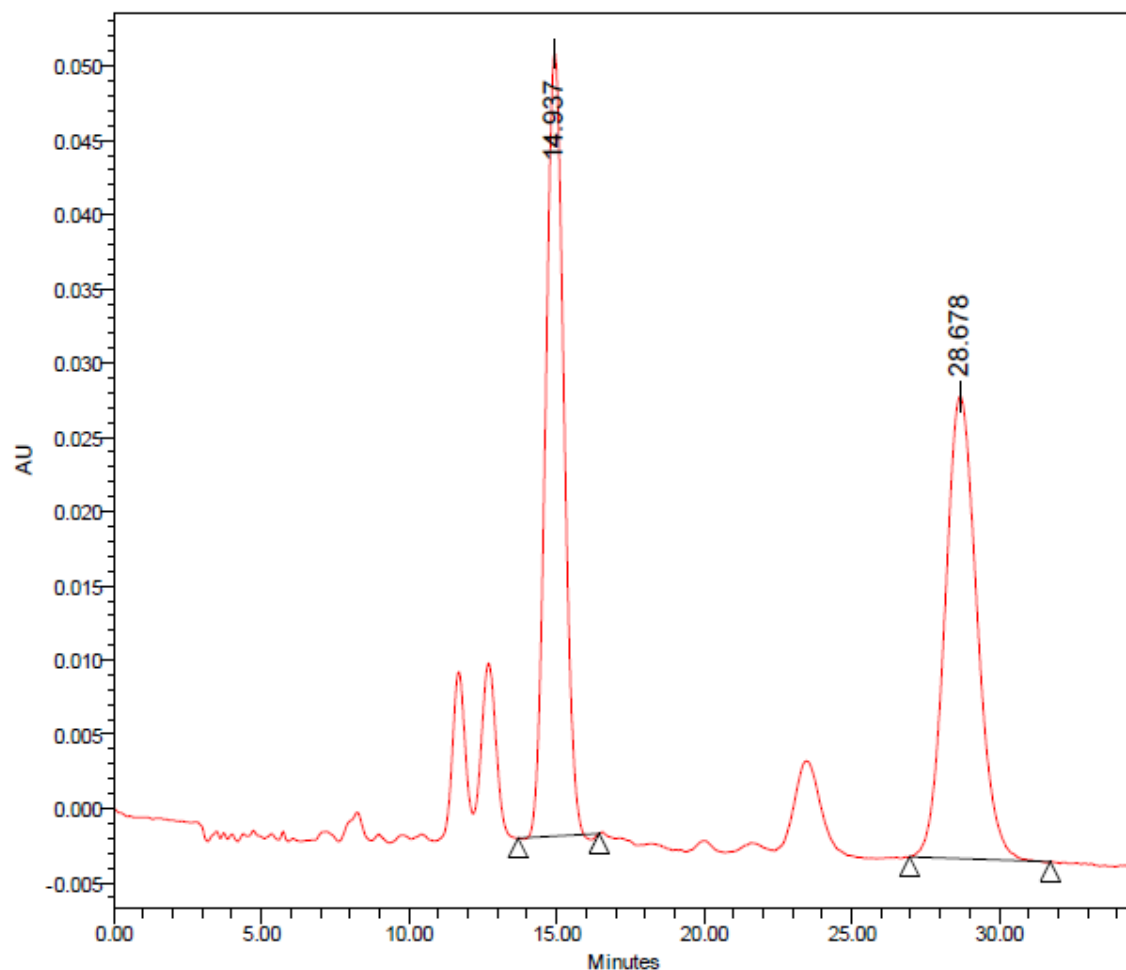
Sample Name: SB 1912 HEX IPA 5050 ODH FR1; Date Acquired: 26-06-2024
 17:53:53 IST; Vial: 1; Injection: 3

Peak Summary with Statistics
Name:

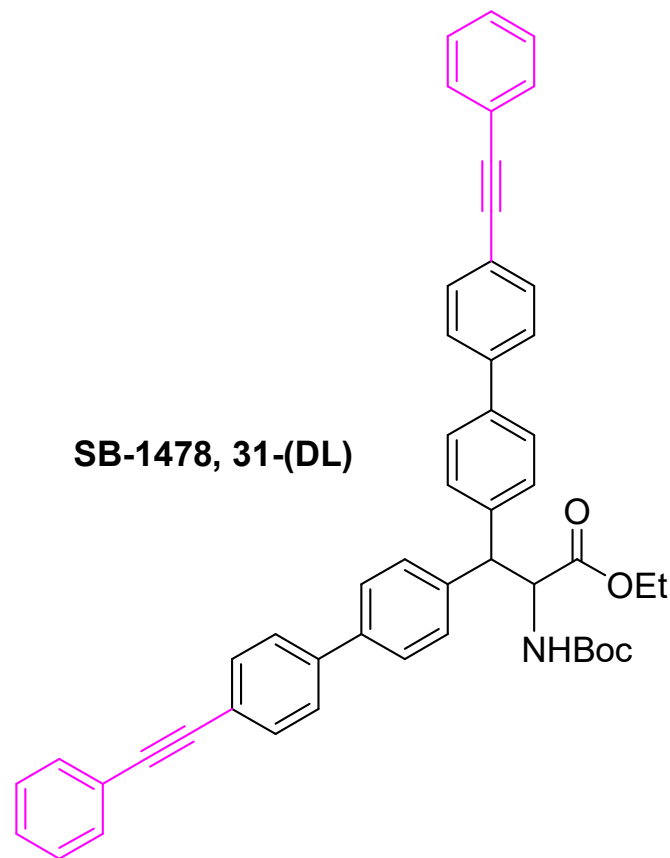
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	SB 1912 HEX IPA 5050 ODH FR1	1	3	8.022	391728	5.00	14038
2	SB 1912 HEX IPA 5050 ODH FR1	1	3	6.896	7440589	95.00	309449
Mean				7.459			
Std. Dev.				0.796			



The enantiomeric ratio ($er = 95:5$) of the compound **28b-(L)** was determined by HPLC using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 291.9 nm, $t_L = 6.89$ min, $t_D = 8.02$ min.



Sample Name: sb 1478 rep hex ipa 5050 ia fr1; Date Acquired: 30-01-2024
11:17:02 IST; Vial: 1; Injection: 1

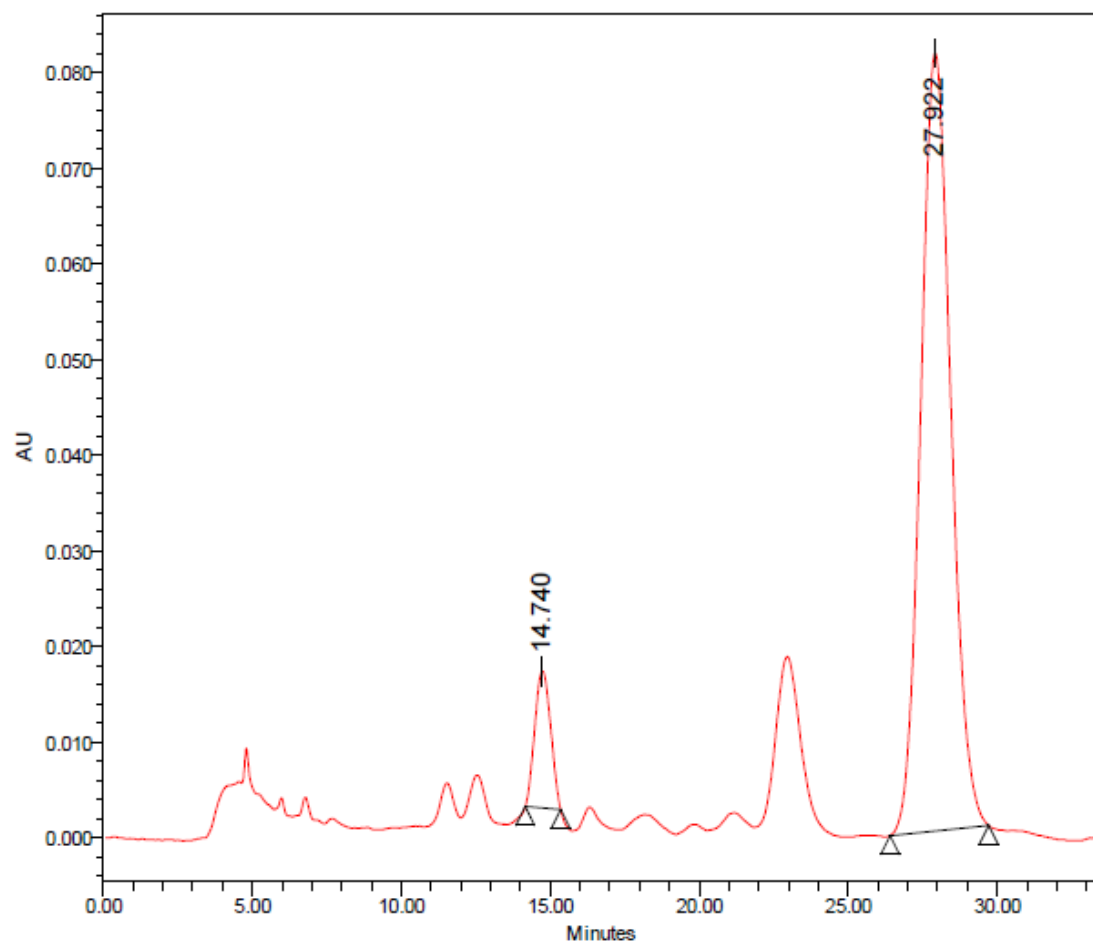


Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1478 rep hex ipa 5050 ia fr1	1	1	28.678	2340685	50.75	31129
2	sb 1478 rep hex ipa 5050 ia fr1	1	1	14.937	2271746	49.25	52708
Mean				21.807			
Std. Dev.				9.716			

The HPLC of the compound **31-(DL)** was determined using the Daicel Chiralpak IA column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 300 nm, $t_L = 14.93$ min, $t_D = 28.67$ min.

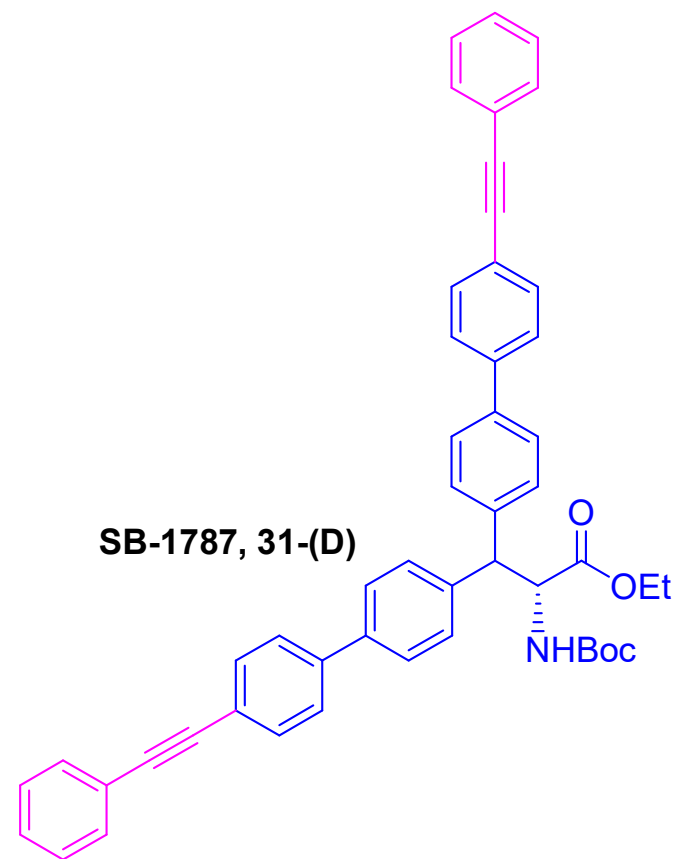


Sample Name: sb 1787rep2 hex ipa 5050 ia fr1; Date Acquired: 30-01-2024
15:25:28 IST; Vial: 1; Injection: 4

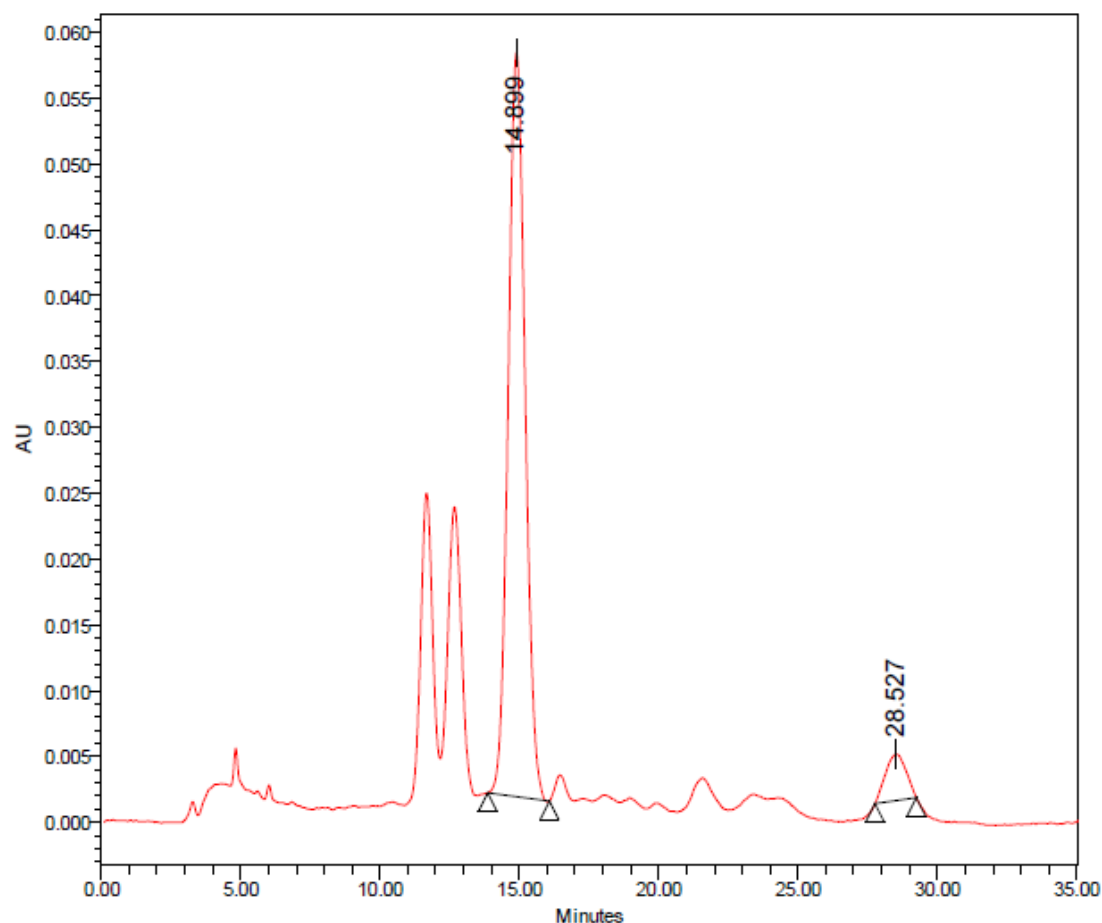
Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1787rep2 hex ipa 5050 ia fr1	1	4	27.922	5718400	91.52	81349
2	sb 1787rep2 hex ipa 5050 ia fr1	1	4	14.740	529987	8.48	14312
Mean				21.331			
Std. Dev.				9.321			



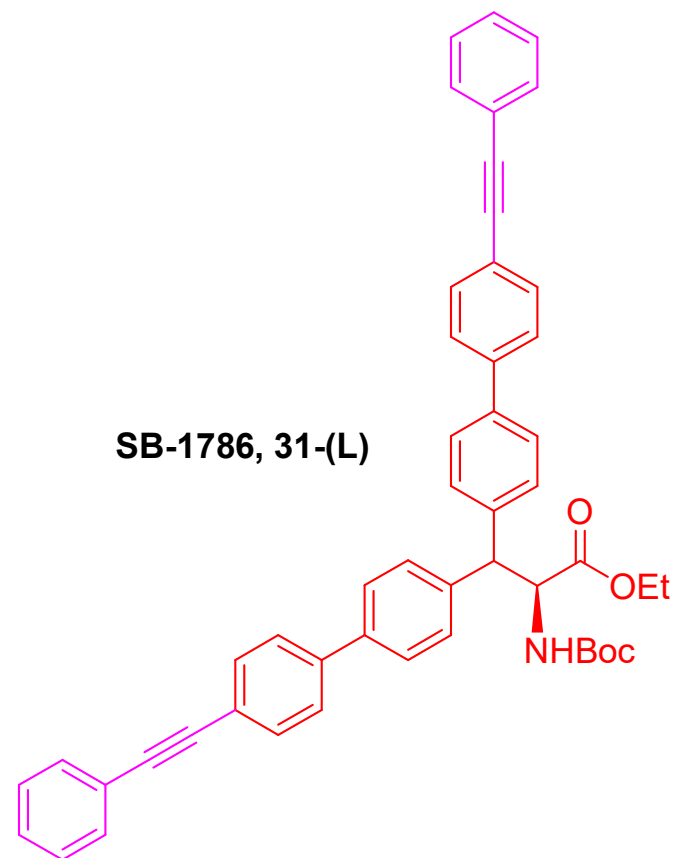
The enantiomeric ratio ($er = 92:8$) of the compound **31-(D)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 300 nm, $t_L = 14.74$ min, $t_D = 27.92$ min.



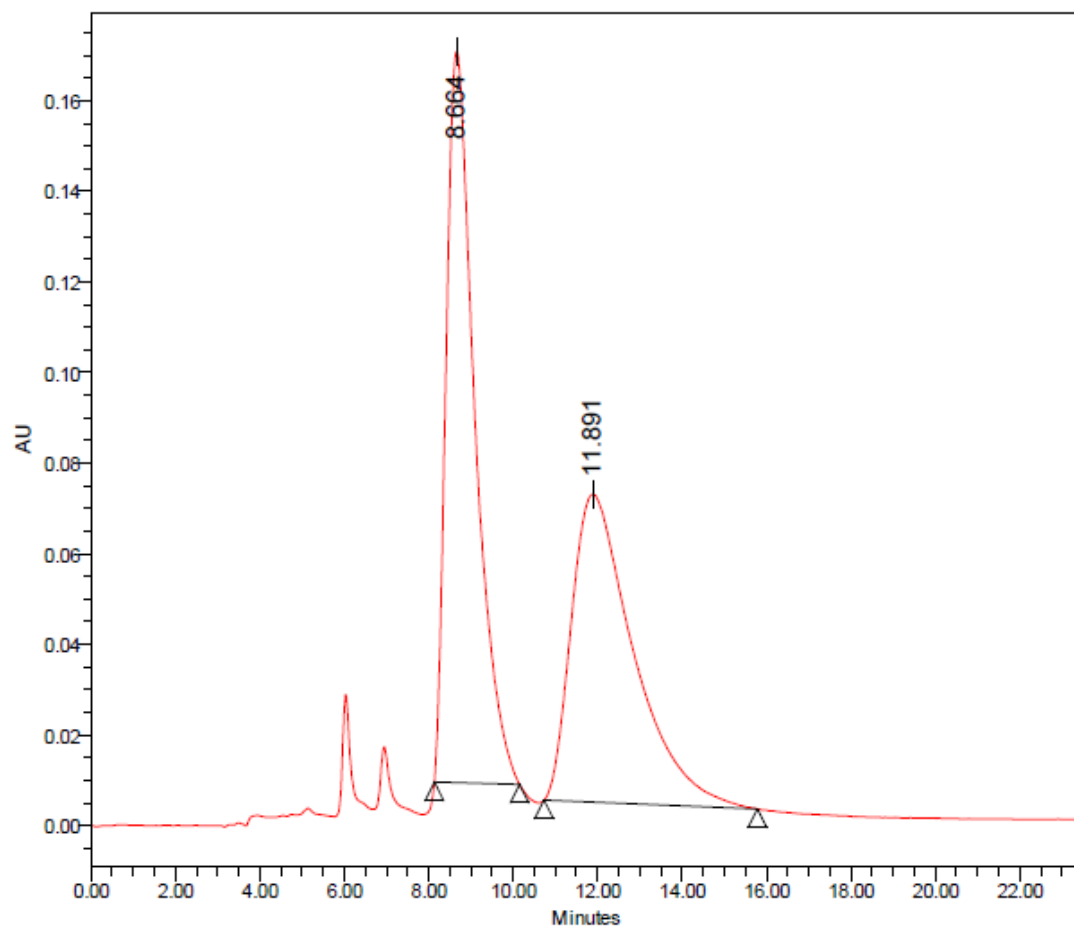
Sample Name: sb 1786rep hex ipa 5050 ia fr1; Date Acquired: 30-01-2024
12:03:54 IST; Vial: 1; Injection: 1

Peak Summary with Statistics
Name:

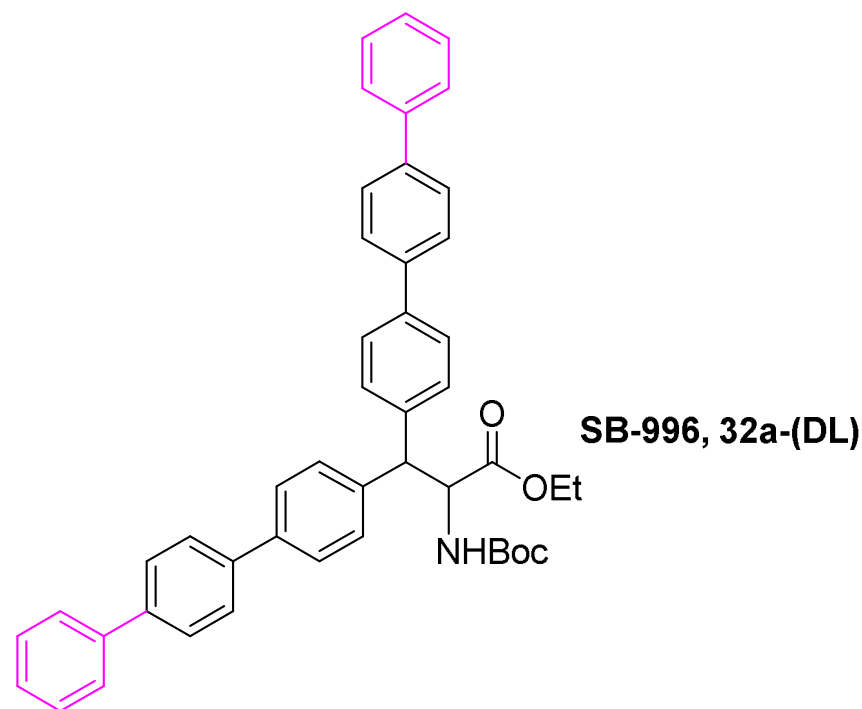
	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1786rep hex ipa 5050 ia fr1	1	1	28.527	180751	7.00	3524
2	sb 1786rep hex ipa 5050 ia fr1	1	1	14.899	2400595	93.00	56507
Mean				21.713			
Std. Dev.				9.637			



The enantiomeric ratio ($er = 93:7$) of the compound **31-(L)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 300 nm, $t_L = 14.89$ min, $t_D = 28.52$ min.



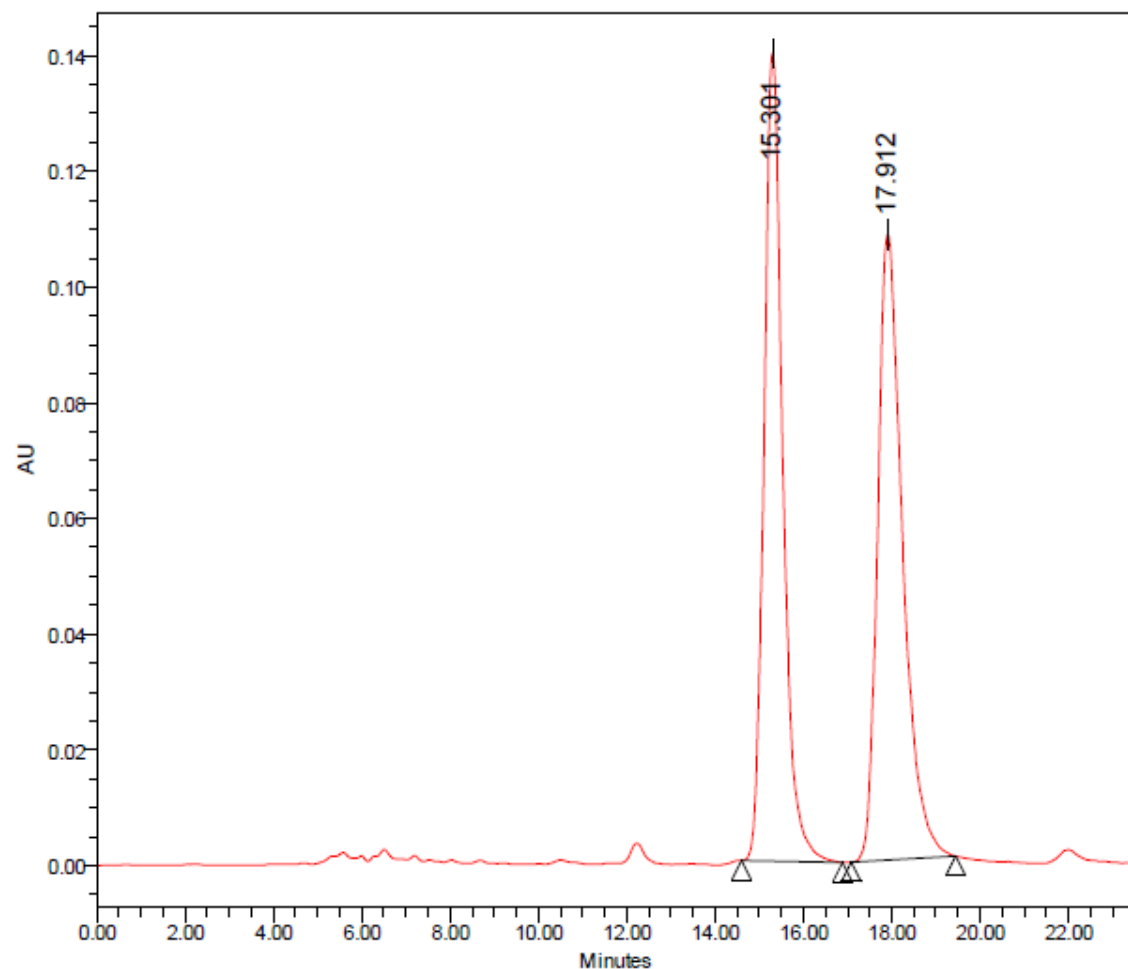
Sample Name: sb 996 hex ipa 5050odh fr1; Date Acquired: 23-02-2024 16:10:46
IST; Vial: 1; Injection: 1



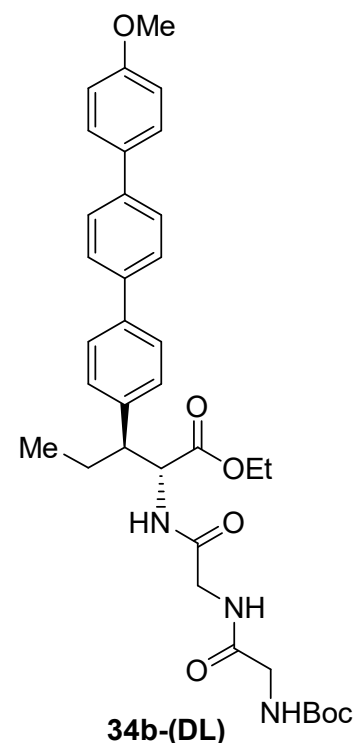
Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 996 hex ipa 5050odh fr1	1	1	11.891	6912596	47.56	67925
2	sb 996 hex ipa 5050odh fr1	1	1	8.664	7622842	52.44	161281
Mean				10.278			
Std. Dev.				2.281			

The HPLC of the compound **32a-(DL)** was determined using the Daicel Chiralcel ODH column, hexane/*i*-PrOH (50:50), flow rate 1.0 mL/min, UV detection at 296 nm, $t_D = 8.66$ min, $t_L = 11.89$ min.



Sample Name: sb 1541 rep hexipa8020ia fr1; Date Acquired: 08-07-2023
13:57:38 IST; Vial: 1; Injection: 6

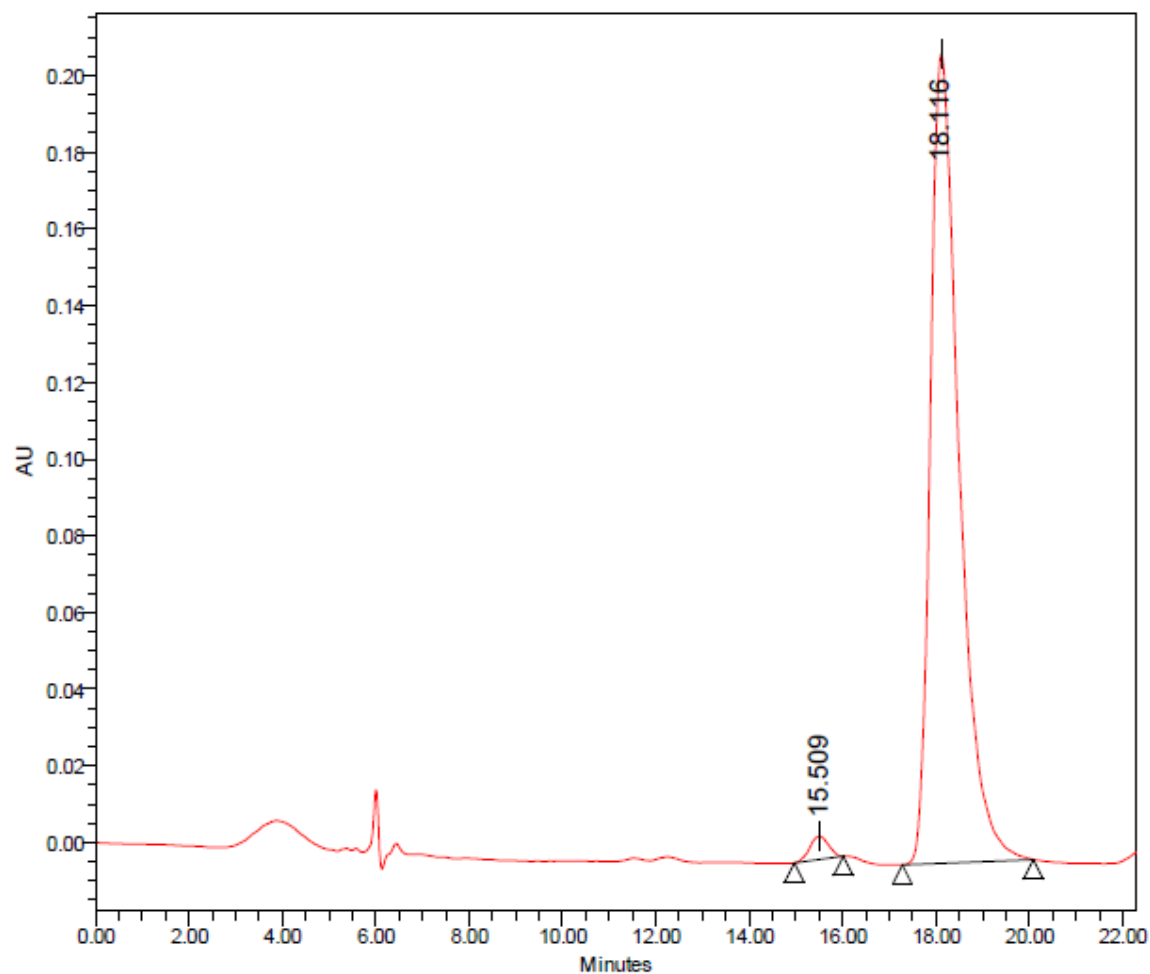


Peak Summary with Statistics

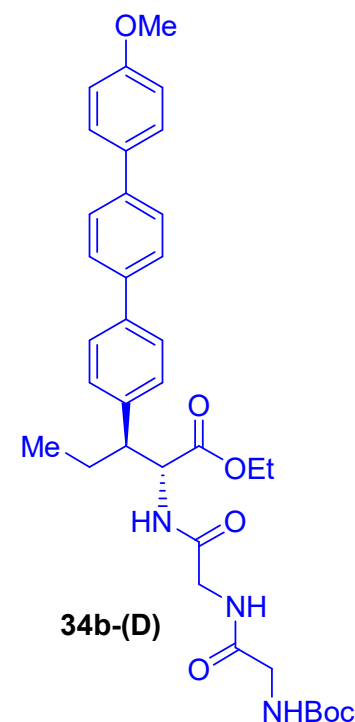
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1541 rep hexipa8020ia fr1	1	6	17.912	4242533	50.72	108216
2	sb 1541 rep hexipa8020ia fr1	1	6	15.301	4121449	49.28	139624
Mean				16.606			
Std. Dev.				1.846			

The HPLC of the compound **34b-(DL)** was determined using the Daicel Chiralpak IA column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 15.30$ min, $t_D = 17.91$ min.



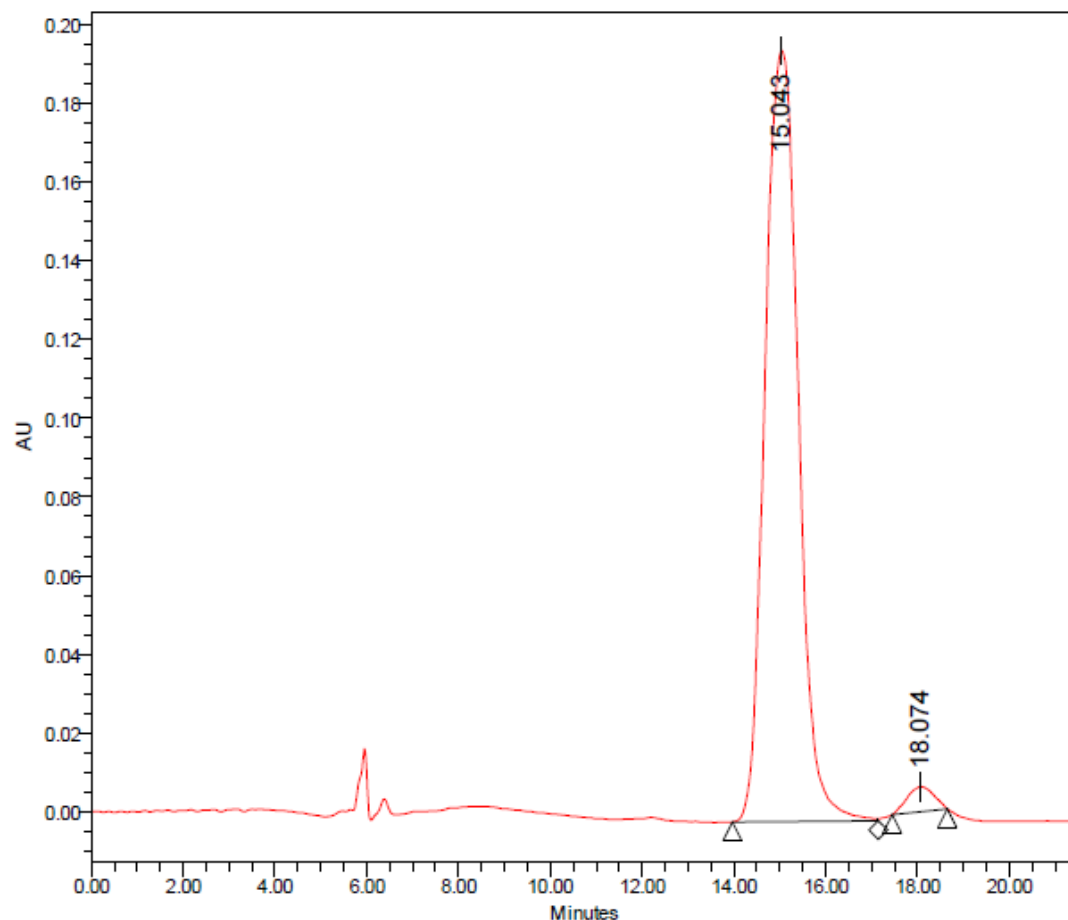
Sample Name: sb 1543 rep hexipa8020ia fr1; Date Acquired: 08-07-2023
 14:21:49 IST; Vial: 1; Injection: 7



Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1543 rep hexipa8020ia fr1	1	7	18.116	9022613	98.14	211024
2	sb 1543 rep hexipa8020ia fr1	1	7	15.509	171210	1.86	6095
Mean				16.812			
Std. Dev.				1.843			

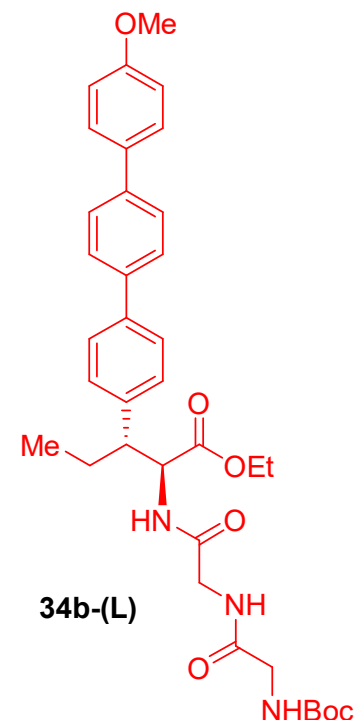
The enantiomeric ratio ($er = 98:2$) of the compound **34b-(D)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 15.50$ min, $t_D = 18.11$ min.



Sample Name: sb 1542 rep hexipa8020ia fr1; Date Acquired: 08-07-2023
 14:50:39 IST; Vial: 1; Injection: 1

Peak Summary with Statistics
Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	sb 1542 rep hexipa8020ia fr1	1	1	15.043	9883634	97.47	195855
2	sb 1542 rep hexipa8020ia fr1	1	1	18.074	256341	2.53	6314
Mean				16.558			
Std. Dev.				2.143			



The enantiomeric ratio ($er = 97:3$) of the compound **34b-(L)** was determined by HPLC using the Daicel Chiralpak IA column, hexane/*i*-PrOH (80:20), flow rate 1.0 mL/min, UV detection at 254 nm, $t_L = 15.04$ min, $t_D = 18.07$ min.